

# AMERICAN ARTISAN and Hardware Record

JAN 10 1921

Vol. 81. No. 2.

620 SOUTH MICHIGAN AVENUE, CHICAGO, JANUARY 8, 1921.

\$2.00 Per Year.

## "YANKEE" TOOLS



**O**FTEN, in talking about tools, mechanics will refer to Yankee Tools as the best.

Each year we find more and more mechanics, artisans and "handy men" buying Yankee Tools because they have learned from the experience of their fellow workers and friends that Yankee Tools are dependable—that they work smoothly—last long—are strictly first class in all respects and guaranteed in every particular as to quality.

You can always sell Yankee Tools—they always represent good tool investments.

*Write for a supply of Yankee Tool Books to give to your customers. Ask for our latest catalog also.*

*Your Jobber can supply you.*

**NORTH BROS.  
MFG. CO.  
PHILA.  
PA.**

"YANKEE" TOOLS  
Make Better Mechanics

"YANKEE" TOOLS  
Multiply Man's Power





## QUICK MEAL

Blue, Black or White  
Porcelain Enameled  
Coal Ranges

are the most up-to-date  
ranges made.

They will last a lifetime.

*Place your orders now.*

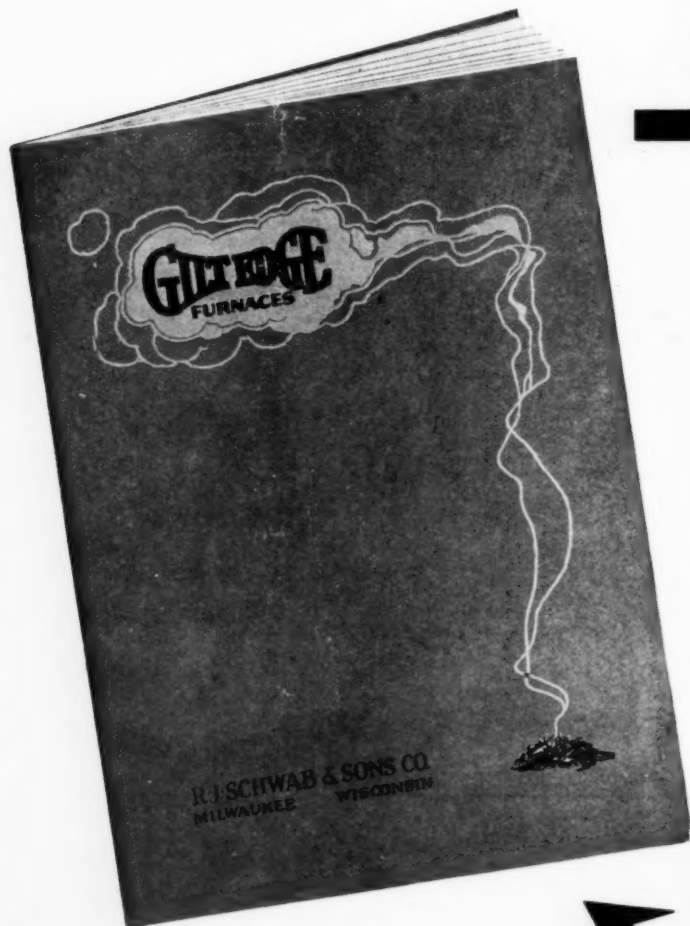
**Quick Meal Stove Co.**

Division of American Stove Co.

825 Chouteau Avenue

St. Louis, Mo.

## The New GILT-EDGE Catalog Is Ready for Distribution



THIS catalog in addition to detailed description of many points of advantages of the GILT-EDGE Furnaces, contains some valuable data on furnace installation.

It shows by means of text and diagrammed illustrations the proper construction of chimney flues, and the proper method of installing hot air pipes and cold air returns. This information should be in the hands of every heating contractor.

*If you have not already received your copy, send for it TODAY.*

**R. J. Schwab & Sons Co.**

285 Clinton Street, Milwaukee, Wis.

FOUNDED 1880  
BY  
DANIEL STERN  
Thoroughly Covers  
The Hardware, Stove,  
Sheet Metal, and Warm  
Air Heating and Venti-  
lating Interests

# AMERICAN ARTISAN and Hardware Record

Address all communications and  
remittances to  
AMERICAN ARTISAN  
AND  
HARDWARE RECORD  
620 South Michigan Avenue  
Chicago, Illinois

PUBLISHED EVERY SATURDAY BY ESTATE OF DANIEL STERN

TERMS OF SUBSCRIPTION IN THE UNITED STATES AND ITS POSSESSIONS (Invariably in Advance) ONE YEAR POSTAGE PAID \$2.00  
FOREIGN COUNTRIES ONE YEAR POSTAGE PAID \$4.00 CANADA ONE YEAR POSTAGE PAID \$3.00

Entered as Second-Class Matter June 25 1885 at the Post Office at Chicago, Illinois under Act of March 3rd 1879

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CHICAGO, JANUARY 8, 1921.

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Much of the profit in the future will come from labor, material and time which has been allowed to be wasted.

**Profits of the Future.** Much of the competition during the past three years has been based upon the ability to have the goods in stock.

In the future—in fact, right now—competition will be based upon the ability to render the best service at the same cost, or the same service at lower cost.

In other words, we have gotten back to where we were before the great war, and the retail hardware dealer or contractor who does not make certain that his expenses for operating his store are kept down to a proper percentage of his total business will be left behind in the period of stiff competition which we are all facing now.

This does not mean that you should start in to lop off all sorts of expenditures. It does not mean that you should cut down your advertising expenditures, for example.

Not at all. But it does mean that you should make sure that your advertising is of the kind that brings customers into your store with a definite purpose in view to buy some specific article.

It also means that your salesmen should put forth every effort to make additional sales to these same customers.

If your present system of advertising fails in this respect, or if your salesforce is lacking in real selling ability—then change your system of advertising or secure salesmen who are more than ordertakers.

It also means that you must have an accounting system that makes it possible for you to go to your books at any time and within a short while find the information you want, for example, about the proportion of John Smith's sales to the salary you are paying him; or about the turnover of that line of

washing machines or vacuum cleaners you put in a year ago; or about the returns on your advertising in one paper as against another.

Here are three definite points for you to consider in connection with your plans to make the year of 1921 a year of real progress and profit.

For that is what you intend to do, isn't it?

♦ ♦ ♦ ♦ ♦

During the recent annual convention in Chicago of the National Lumber Manufacturers' Association, Manager Wilson Compton cited the following figures from the reports of the Department of Labor to support his statement that home building and general building construction can be expected to be resumed in the near future.

## Building Materials Decline

Taking the prevailing average prices for the twelve months preceding July 1, 1914, as index basis at 100, Mr. Compton found that on January 1, 1919, prices compared in this manner: Lumber, 164; common brick, 205; sand, gravel and stone, 205; structural steel, 235; cement, 173.

During 1920, there was a tremendous skyrocketing of prices, as shown by these figures: Lumber reached its highest point in March at 328; common brick in July at 312; sand, etc., in October at 266; structural steel in March at 310; cement in December at 221.

January 1, 1921, the figures were as follows: Lumber, 149; common brick, 291; sand, etc., 260; structural steel, 204; cement, 221.

When you compare these figures with those in the general hardware field, you will feel like patting yourself on the back. For at no time did Hardware show such tremendous advances as took place, for example, in the rawest of raw materials, such as



sand, gravel and stone, or even in lumber, which is a more or less finished product.

The principal point of interest, however, is not that the hardware manufacturer and the hardware wholesaler and the hardware retailer showed a fair sense of decency in their consideration of the general public, but that the principal materials which go into building construction, both for home and business uses, are coming down to prices that represent somewhere nearly the cost of the raw material and the cost of labor to put it into usable shape, plus a reasonable profit.

With this accomplished, we have good reason to look for a speedy resumption of home building and of business construction, both of which are bound to have far-reaching effects on the general living conditions for all of us.

In the first place, with lower building costs, houses will be more plentiful; people living in one or two furnished rooms because they cannot afford to pay the enormous rents for houses or apartments will be occupying real homes. Rents will come down.

In the second place, building labor, which is now on a basis of less than 50 per cent employment, will be busy for a long period at good wages.

In the third place, factories making builders' hardware will have all they can do to furnish the needed supplies. Their employees will be on full time at good pay.

In the fourth place, the retail hardware dealer will once more be engaged in figuring on bids for locks, nails, screws, hinges and the hundreds of other items that are classed as "Builders' Hardware." He will have an added source of profit, and his employees will have plenty to do selling tools and other articles which always sell in larger quantity when building operations are brisk.

So far as the retail hardware dealer is concerned, it is necessary, however, that he prepare now for this increased activity, for if he waits until the demand for these lines is actually upon him he will not be able to reap the benefit, because he will not have the goods to deliver.

Orders should be prepared now and placed this month and next for fair quantities, with arrangements for such price and delivery conditions as the merchant's peculiar loca-

tion and the local situation may indicate are desirable.

♦ ♦ ♦ ♦ ♦

The annual conventions of the National Hardware Association and of the American Hardware Manufacturers' Association were held in the week of October 17, 1920.

**American  
Artisan  
Always First**

The entire proceedings of both conventions were published the same week by American Artisan and Hardware Record.

No other publication gave a complete report in any issue, and some of the addresses delivered at that time were served up in the December issue of some trade papers and magazines which lay great claims to leadership in the hardware field.

The annual convention of the National Sheet Metal Contractors' Association was held during the week of June 7, 1920. The entire proceedings were published in our issue of June 12th—the same week.

No other publication gave a complete report in any issue, and some of the addresses delivered at that time were served up as "news" in the November issues of some trade papers which presume to be "leaders in the field of sheet metal work and warm air heating and ventilating."

The great majority of the annual state conventions of the various retail hardware and sheet metal contractors' associations will be held during January and February.

As usual, American Artisan and Hardware Record will not only publish complete reports of these conventions the same week they take place, but will also—judging from all the experience of the past—be the only publication in these great trade fields that will make it possible for members and others interested who are unable to attend these associations, to read in their homes the week following a full and correct story of what takes place.

For this reason alone, the coming convention issues of American Artisan and Hardware Record will be watched for, and when received will be read with increased interest, thus making them of exceptional value, from the standpoint of advertising to manufacturers and wholesale distributors of hardware and kindred lines.



## Random Notes and Sketches

By Sidney Arnold

"Gus" Ruhling, who sells "V. & B." hammers, chisels and other tools for the Vaughan & Bushnell Manufacturing Company, was in a Detroit hotel the other day partaking of a frugal lunch, beginning with Blue Points and ending with Fromage de Roquefort and hard tacks. Noticing a dead fly in his soup, he called the waiter's attention to the fact.

After careful examination, the waiter replied, "Yes, sir, hi've seen it 'appen before. Hit's boiling 'em what does it, poor things."

\* \* \*

"I say, who was here with you last night?"

"Only Myrtle, father."

"Well, tell Myrtle she left her electric cigar lighter on the piano."

\* \* \*

Put more interest into your work and you will draw more interest out of it.

\* \* \*

The father of a certain charming girl is well known in this town as "a very tight old gentleman."

When dad recently received a young man who for some time had been "paying attention" to the daughter, it was the old gentleman who made the first observation:

"Huh! So you want to marry my daughter, eh?"

"Yes, sir; very much, indeed."

"Um—let me see. Can you support her in the style to which she has been accustomed?"

"I can, sir," said the young man, "but I am not mean enough to do it."

\* \* \*

Mistress to new maid—I forgot to tell you, Mary, that we have breakfast at 8 o'clock sharp.

Maid—That's all right, mum if I ain't down on time, don't wait for me.

\* \* \*

"Were your problems all correct, dear?"

"No, mamma, they were every one wrong," replied the child.

"All wrong?" repeated the amazed mother. "Oh, I'm sorry."

"Well, mamma," said the little one consolingly, "you needn't worry. All the other little girls' mammas had them wrong, too."

\* \* \*

There are thousands of ways of being wrong. There is but one way of being right.

\* \* \*

"It's no use," sighed the nature wizard, "I may as well give up."

"What is bothering you?" asked his companion, sympathetically.

"I started a few years ago on a whim of mine. I took a head of cabbage and crossed it with a white potato, and grew eyes on it; then I crossed them with a cornstalk and grew ears on it; then I crossed that with a celery and grew a neck on it; then I crossed that with a cocoanut and grew hair on it, but hanged if I can figure out what to do for a nose and mouth!"

A man who stuttered very badly went to a specialist, and after ten difficult lessons learned to say quite distinctly, "Peter Piper picked a peck of pickle peppers." His friends congratulated him upon his splendid achievement.

"Yes," said the man doubtfully, "but it's s-s-such a d-d-deucedly d-d-difficult remark to w-work into an ordin-n-nary c-c-convers-s-sation, y' know."

\* \* \*

An old lady, after waiting in a confectionery store for about ten minutes, grew grossly impatient at the lack of service.

Finally she rapped sharply on the counter.

"Here, young lady," she called, "who waits on the nuts?"

\* \* \*

He was very keen on his newly-purchased farm, was young Chubson, and wanted to increase his stock. So he bought some pigs before his new sty was quite ready.

He went to a neighbor, and asked him to let the pigs be put in the latter's sty.

"I've bought two thowth and pigth," he explained.

The neighbor wasn't used to Chubson's lisp and scratched his head.

"Two thousand pigs!" he muttered.

"Why, my sty will only hold half a dozen!"

"You don't understand!" said Chubson shortly. "I didn't thay two thouthand pigth, but two thowth and pigth."

"I understand all right," replied the other; "but you must be crazy."

"I'll thay it again!" yelled Chubson, in a rage. "I dodn't thay two thousand pigth, but two thows and two pigth!"

\* \* \*

"Say Daisy, did yer see when I took hold of yer hand the funny look yer ma gave me?"

"Go on, Tim, ma didn't give it to yer; you've always had it."

\* \* \*

One of the hardest things to learn is to get our thanks from ourselves for the work we do. Words of gratitude from others are pleasing. But the world at large does not spend much time in dispensing thanks for favors received or deeds performed. We will avoid many a heartache if we acquire the habit of getting our satisfaction from within—from the sense of having done a good piece of work. Here are some verses which suggest that lesson:

### The Way of the World.

Some day the world may care—  
Say in a hundred years from now—  
For the man with the bushy hair  
And the pallid and lofty brow.  
People may gaze at the rusty pen  
With which he aimed at the hearts of men,  
And the praise he craved may be given then  
And his name in a temple of fame may glow.  
For that is the way of the world, you know.

In a dark and dismal nook,  
Where gladness never finds its way,  
Some man with a hungry look  
May labor for little pay.  
And when he is dead and has ceased to care,  
The relic hunters may gather there,  
And pay to sit in his cheap old chair;  
Thus they will settle the debt we owe,  
For that is the way of the world, you know.

# Up-to-the-Minute News Siftings

*Items of Interest to Dealers Gleaned from Many Fields.  
National and Local Business Plans, Problems, and Practices.*

## **ABRAM COX CO. EMPLOYEES VOTE 15 PER CENT WAGE REDUCTION.**

Employees of the Abram Cox Stove Company, Philadelphia, working under an industrial democracy plan, begin the new year with wages 15 per cent lower. They voluntarily voted this reduction themselves. A statement explaining this action, from the viewpoint of Company and workers, says:

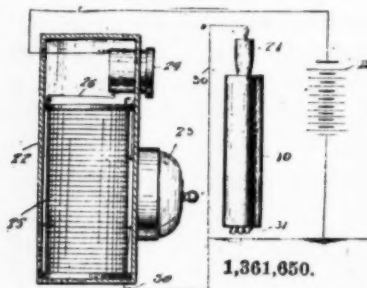
"The cost of foodstuffs has been declining for several weeks, and other commodities are moving toward a lower level. To help this downward trend, the employees felt that this action, with the reduction in selling prices that would immediately follow, would stimulate the company's business, and thereby give the men more steady employment."

## **Gets Trade-Mark Registered in Patent Office.**

Under number 138,181, United States Patent Office registration has been obtained by DeMaster and DeMaster, Pittsburgh, Pennsylvania, for the trade-mark reproduced herewith. The particular description of goods to which it applies is stove and nickle polishes. The Company claims use of this trade-mark since May 26, 1919. Application for registration was filed November 14, 1919.

## **Patents Ignition Device for Gas Stoves.**

Joseph Varin, Montreal, Quebec, Canada, assignor of one-half to Thomas Ducharme, Montreal, Canada, has secured United States patent rights, under number 1,361,650, for an ignition device for gas stoves described herewith:



and means whereby when said knob is moved said switch terminals will be brought into engagement and the contact member projected from the handle upon further movement of said knob.

## **Who Manufactures the Wolverine and Steel Star Ovens.**

TO AMERICAN ARTISAN AND HARDWARE RECORD:

I would like to know who manufactures the Wolver-

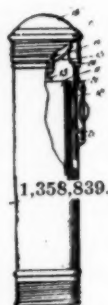
ine gas-oil stove, also a heating stove called the latest improved Overdraft Steel Star to burn hard or soft coal or wood.

M. J. WEBER.

Brownsville, Indiana, December 30, 1920.

## **Is Granted Patent Rights for Battery Hand Lamp.**

Under number 1,358,839, United States patent rights have been granted to George D. Gallagher, Washington, D. C., assignor to Winchester Repeating Arms Company, New Haven, Connecticut, a Corporation of Connecticut, for a battery hand lamp described as follows:



In a battery hand lamp comprising a case having a battery therein, an incandescent bulb at one end of the case and switch mechanism mounted on the exterior of the case, a conducting member for completing circuit between the bulb and the switch mechanism, said member being surrounded by insulating material and held in fixed position within the case by members formed out of the material thereof.

## **Says Trade Journals Are Valuable to Business.**

"As a national advertiser I should value more highly the services of an advertising man familiar with the trade journals in my industry," says Edward N. Hurley.

"I am fearful that our manufacturers, merchants, and advertising men do not appreciate the trade publications which are doing so much from a scientific as well as a practical standpoint in stabilizing conditions and working out the many problems existing in their respective fields.

"When I was chairman of the Federal Trade Commission I made it a point to have the principal trade papers in the United States sent to me regularly.

"These were read not only by myself but by the entire staff so that we might have a finger on the pulse of the country's industry.

"Advertising agencies placing national and international advertising could well insist on every man in their employ reading the trade journals of the industries of their clients so that they may keep themselves currently informed on the conditions in the businesses for which they were writing copy. I believe in the business journals.

"I have been closely associated with the work of many and have made a study of them, and I am firmly convinced of the editorial strength and value of many of these publications."



## So-called Bargain Sales and Stoves Fail to Reveal Any Real Stove Bargains

*Big Chicago Stores Are Not Cutting Prices Materially on Stoves, Thus Indicating Stability of Values.*

In the January second issue of the *Chicago Tribune* there appeared two advertisements from which the four clippings shown in the accompanying illustration are taken (Figure 1).

Some of the descriptions, and indeed one of the headlines, are written in such a way as to give the person who is unfamiliar with true values the impression that the bottom has fallen out of the stove market, but when you come to examine the various items of-

\$10.00, or half a cent per pound. On a two hundred pound stove, the difference in the raw material cost would mean only one dollar, provided a large portion of this reduction had not been absorbed by the big advance in the freight rate and by the fact that many of the stove foundries have been run, and will continue for some time to run, on part time only, thereby materially increasing the overhead charge on each stove manufactured.

**Cast Range \$53.75**  
Trimmed with polished nickel—fitted with duplex grates for wood or coal. Has six 2-inch cooking holes and 18 1/2 inch oven. Just as shown, in stock at \$53.75.  
**High Closet \$12 Extra**  
**Come Early**

**Now \$26.95**  
The Regent Air Tight heater—burns all of the cheaper fuels—luxuriously trimmed with nickel. Has 12 inch fire pot. Remember every heater goes at a bargain price.

**Now \$35.79**  
The Perfect Hot Blast with mica paneled fuel door and hand some nickel trimmings. Extra size—has 17 inch fire pot. Many other bargains are offered at most prices.

**Stoves—Back to Pre-War Prices**  
Third Floor—North

**"Perfect" oil heater, smokeless, brass burner, gallon tank, automatic oil gauge, well finished, 7.95 value, 5.95 at**  
**"Sun Heat" gas heaters, nickel trimmed, radiate a great amount of heat, 1.95 value, now 1.95 at**

**This Combination \$69.50**  
The Duplex Regent—burns gas or coal and does more perfect baking and cooking. Handsomely trimmed with nickel and porcelain. Has a large oven for coal and three gas burners—three baking sheets, 16 1/2 inch.  
**High Closet \$10.35 Extra**  
**EASY TERMS**

Four Clippings From Chicago Department and Furniture Store Advertisements. No Indication of Really Deep Reductions in Price Are Shown.

ferred at these so-called bargain prices the conviction steals upon you that these "bargains" are of the same kind that were offered by certain Chicago department stores on women's garments in the week after Christmas: *Where any reduction had been made at all, it did not exceed ten per cent from the regular height-of-season price.*

As a matter of fact, unless a dire necessity for raising cash exists, there is under the present conditions little or no reason for cutting prices on stoves or heaters.

The stove that was bought by a retail hardware dealer in 1920 at the early season price is worth one hundred cents on the dollar, and when this same dealer comes into the market this month or next he will find it necessary to pay about the same—and possibly a little more than he did a year ago.

It is true, of course, that pig iron is lower now than it was in 1920 at this time. A fairly good grade can no doubt be bought at about \$33.00 a ton, as against \$43.00 a year ago. This would make a difference of

The only way in which the prices on heaters and ranges can be reduced to any considerable extent is by a heavy cut in labor wages, and that appears to be out of the question at this writing, as the stove molders have refused point blank to consider any proposition that meant a lower scale, either for piece work or by the day.

The important point for the retail hardware dealer who sells stoves to consider now is that he must convince the people in his community that stove prices at the present figures represent reasonably good value as compared with wages in stove foundries, cost of raw material and with the retail prices on many other lines, in most of which values had been greatly inflated, and that, therefore, no deep cut can rightly be expected, other than such as may be made for clearance purposes.

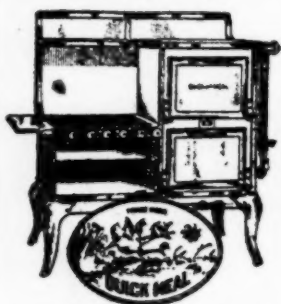
About six years ago, we heard much talk about the "state of mind" with reference to the poor business which was existent at that time.

Today, we have a condition somewhat on the same order. There is a state of mind on the part of the

consumer who is not conversant with all the facts, that all prices have been unduly inflated, and so he has refused to buy, until these improper prices have been reduced to what he thinks is a proper figure.

The retailer of stoves who is on the job can and does convince his people that such a condition does not obtain in the stove business, and thus changes the "state of mind" of his prospective customers, with the result that they conclude not to wait any longer with the purchase of the stove or range that they really need—

## No more Xmas kitchen drudgery for your wife



With a QUICK MEAL Gas Range, equipped with the "Lorain" Oven Heat Regulator, your wife need spend only a little while in the kitchen every day, even holidays. "Lorain" will cook her entire meal at one time, in the oven, without having to watch it. She puts the meal in the oven, sets the "Lorain" for 4 or 5 hour cooking, then she can be miles away enjoying herself. When she gets back, the meal will be cooked to perfection.

### QUICK MEAL Gas Ranges

equipped with the "Lorain" Oven Heat Regulator, make cooking easy and safe. There are no "unlucky" baking days with a "Lorain." It gives her the exact measured temperature required for any kind of even cooking. Come in and let us demonstrate this great new invention and how it is simplifying the work of tens of thousands of American housewives. Ask for the booklet, "An Easier Day's Work." It is free.

—Pettis basement

Quality is Strong Feature of This Stove Advertisement.

and he makes his sales at a fair profit.

It is, therefore, distinctly up to the retailer to change this general "state of mind." It can be done, for there are any number of instances where it has been done—where the dealer not only has sold out practically his entire stock of stoves, but has realized a good average profit—and these instances are to be found right next door to you, in communities where the underlying conditions are no different from yours.

Note, for example, the advertisement shown in Figure 2. This advertisement was published by the Pettis Dry Goods Company, Indianapolis, as a part of a full page spread in the *Indianapolis Star*.

It will be seen that no reference to "reduced prices" are made. As a matter of fact, no prices are mentioned at all. The entire selling talk is on the greater efficiency of the Quick Meal Gas Range. "An easier day's work," is the thought that runs through the whole advertisement, and judging from the number of Quick Meal Range sales which the writer witnessed while visiting this store, there are enough people in Indian-

apolis who are more interested in "Service" than in mere "Price," to make this sort of advertising successful.

If you have faith in yourself as a merchant you can develop the same condition in your locality, but you will not be able to accomplish this result unless you have this faith in yourself, and also a bit of confidence in the manufacturer from whom you are buying your stoves and ranges.

With the latter clause we mean that when his traveling salesman comes to see you, in a month or so, you will listen to his statement with an open mind and place your orders for the coming season, with confidence that the prices which the salesman quotes are fairly based upon costs of raw material, labor and overhead, and that no fictitious figures have been put in for extra profits.

The manufacturers of stoves and ranges, generally speaking, have not taken undue profits. Their selling prices have been based fairly on costs, so far as it was possible during the period when they could not tell from week to week what they would have to pay for pig iron or for labor, for from spring 1917 up to spring 1920 nobody could be positive on those two matters for any length of time.

Decide now on these two rules for your 1921 stove business:

(1) Go after all the sales of stoves and ranges in your locality that you can possibly make.

(2) Place orders for such a stock as you can dispose of if you go after the business with real vim and with a well planned campaign.

### Learn All You Can About Your Industry.

Every man in a given industry requires to be taught all about that industry. The management must learn the problems of the worker—economic, social, physical and spiritual.

And the worker must be taught the problems of finance, of buying and selling which confront the manager.

Each must be brought to see the business in its entirety as a great, complex unity in which every man from the big boss down has a place of vital importance.

We must all be taught the meaning of wages and profits.

Business is a public service. Profits are paid the investor by the community because his investment produces something of value to the community.

Wages are paid the worker by the community because his work produces or helps to produce something which the community needs and wants.

Both profits and wages are paid out of production. The better the management and more intelligent the work the larger the production. And the larger the production the greater the share of labor and capital.

The trouble with gossip is that it goes in one ear and then comes out again at the mouth.

If the only way to elevate the stage were to raise the price of admission, we would despair of the drama.



# The Week's Hardware Record

*What Retailers, Jobbers, and Manufacturers Are Doing.  
Latest Selling Methods. Experiences of Successful Men.*

**Your attention is directed to an exclusive feature of AMERICAN ARTISAN AND HARDWARE RECORD. It has the distinction of being the only publication which gives Western hardware and metal prices corrected weekly. You will find these prices on pages 40 to 45 inclusive.**

## PRICE DECLINE IS EXPECTED IN PAINT MATERIALS.

Buyers of paint materials continue to display a waiting attitude with the result that business is confined to small lots for current requirements.

In view of the general tendency of the times for lower prices mixed paints have held relatively firm and some interests are of the opinion that further reductions will have to be made in order to induce business.

The only bright spot appears to be that stocks of raw materials in many lines are low, which may necessitate renewal of supplies after the turn of the year.

The demand for the lead pigments is quiet and in view of the drop in pig lead further price declines are looked for during the month.

Zinc oxide commands fair attention, with business routine and prices steady at the recent decline.

More inquiries are being received for lithopone for forward shipment and producers anticipate a good spring demand.

There is a fairly good business being done in barytes and shipments are now being made quite promptly.

The demand for blanc fixe has shown some falling off and prices are a little easier.

As far as dry colors are concerned the demand continues of a routine character and in view of the stock taking period it is not expected that there will be any revival of interest until after the turn of the year.

Price revisions downward have not been as drastic as in other lines and producers point to the small stocks in the hands of manufacturers.

Varnish gums are still quiet and no price changes of importance have been recorded, but importers look for an upward trend of values as soon as there is a renewal of demand.

Glues are in routine demand, but prices are well maintained as spot stocks are not heavy.

## Estimates Shortage of Houses.

Estimates placing the shortage of houses in America at more than 1,250,000 will be placed before the National Council of the Chamber of Commerce of the United States at a meeting to be held in Washington, January 27 and 28, which will discuss measures to relieve the situation.

The housing shortage, according to John Ihlder, manager of the National Chamber's Civic Development Department, has reached a point where four million persons are inadequately housed.

Mr. Ihlder is helping in the preparation of a program for the conference, which will bring representatives of the 1,400 industrial and commercial organizations making up the National Chamber's membership. He has made a close study of the housing problem.

"For a number of years prior to the World War," said Mr. Ihlder recently, "it is conservatively estimated that there are erected in the United States between 350,000 and 400,000 family dwellings in a year.

"This includes homes and apartments. During the war construction of houses was practically at a stand still with the exception of what building was done by the Government.

"As a result of this we came out of the war far behind our regular building program.

"The situation has not improved a great deal since the signing of the armistice except for a brief spurt early in 1919, because those who contemplated building homes put it off until prices should become stabilized.

"In 1919 it is estimated that there were built only about 70,000 houses in the United States, while the number erected during 1920 will probably turn out to have been even smaller than that figure.

"While it is true there are many houses for sale, these are nearly all now occupied by tenants.

"The number of houses for rent in most communities is practically nil and the majority of these houses are not suitable for the needs of the average wage earner.

"A man with an income of \$5,000 a year or more doesn't have as much trouble getting desirable quarters as the wage earner who can not afford to pay high rents.

"The wage earner and those earning small salaries are the ones who are hit hardest by the housing shortage. It is for these folks that decent homes must be built.

"Meanwhile they, as well as many with larger incomes, are doubling up or taking in lodgers.

"Increased rents, too, have caused many families to share their quarters with outsiders, so we have the anomaly of a block or an apartment house containing a larger number of people than it ever did in the past, yet with an occasional house or apartment vacant because those needing better quarters can't afford to pay any higher rents.

"This overcrowding of rooms is viewed with anxiety by the public health officials who realize how infectious diseases spread under such conditions."

Competition is the life of trade until it becomes destructive, and then it is the death of trade.

## Why Apparent Inconsistencies in Newly Revised Prices on Tools Are in Accord with Actual Conditions

*No Reductions Are Made on Non-Profitable Lines,  
While Considerable Cuts Are Shown on Others*

There has been considerable discussion in the hardware trade, both among wholesalers and retailers, about the revised prices on tools, and in some cases the discussion has developed into active criticism of manufacturers, because some lines were reduced less in proportion than others, some not being reduced at all, and also because the greater reduction on some items appeared to indicate that these items had been sold by the manufacturer at a profiteering figure.

To the person who is not familiar with all the circumstances, these criticisms may seem to be perfectly justified and in most cases they were probably made in good faith, and not with any idea of shifting the blame for high prices from one link in the chain of distribution to another.

There are, however, several facts which may have escaped the notice of the critics, but which have had a great deal to do with some of the apparent inconsistencies in the revised prices.

For example, the class of employes that could be secured from 1917 to the early part of 1920 was not conducive to uniform or large capacity of output. Many men had to be employed who had little or no experience in operating the various machines — with the result that not only was there an extraordinarily large percentage of spoiled material, but also a much smaller total output for each working period than would have been possible with experienced help.

In the second place, these same employes did not show the proper attitude toward their jobs. It was an easy matter to obtain another place if they were discharged, so that even when they became reasonably efficient in the operation of their particular machine, they did not show this greater efficiency in a larger quantity of work performed.

These two facts alone made it well nigh impossible to establish or to use any ordinary system for cost find-

ing, and the only basis for arriving at a cost basis appeared to follow a reasoning somewhat on this order:

"In January, we took in \$200,000 and our outgoing total was \$193,000, leaving a balance of \$7,000.

"In February, the corresponding figures were \$240,000, \$231,000 and \$7,000.

"In March, they were \$270,000, \$260,000 and \$10,000.

"For these three months, the total showed \$710,000 for income, \$686,000 for bills, and \$24,000 for working balance.

"This working balance is too small," say the manufacturers. "We must have at least \$60,000, and the only way we can accomplish this is by a horizontal increase of five per cent."

That is why advances were made by general horizontal increases in most cases.

But there was another important factor which did not come to the average tool buyer's attention — that of material.

For a considerable period, the steel manufacturers were not much interested in producing certain shapes of lower grade steel which are used in the making of popular priced tools, such as cold chisels, etc.

This meant that the tool manufacturer was forced to buy a square steel bar and then pay extra to have it reshaped into octagon rods, which of course unduly increased the material cost for these tools

and thus made it necessary to advance prices on such articles at a much higher rate than the higher priced items.

At the present time, however, there is little or no difficulty in securing the lower grades of tool steel in any shape desired without extra premiums being paid, so that the material cost has been reduced at a greater rate on this class than on those of higher quality, thus making it possible to cut off a larger percentage from the selling price of the former.

Let us now consider the present labor situation.

**B**RACES, Carpenters' Pincers and a few other lines have not been reduced, because these items have always been more or less unprofitable in the past.

Cold Chisels and similar items show a greater percentage of reduction because difficulty in securing the semi-finished steel has been obviated.

Mechanics are taking a more proper attitude toward their work, with the result that there is less breakage and spoilage and greater output per man, thus reducing the overhead expense per item manufactured.

It is now possible to figure costs with a reasonable degree of accuracy, while this was impossible during the past three years because of conditions in the material market as well as because of the indifference and inefficiency of the labor which could be secured.

Prices may now be considered to be reasonably established, at least for the next six months, and buying should proceed without much further delay, especially in view of the fact that building operations bid fair to take on new life because of fairly deep cuts in material, ranging from 10 to 30 per cent below the prices in force on July 1, 1920.



Tool mechanics have lost their jobs in the shops that were working on War or Navy Department orders. Many that had been employed in factories making auto accessories were laid off and have drifted back to their former plants, and some of them have secured jobs at their old posts, replacing the non-efficient and indifferent ones.

In addition, the entire attitude of the workers has been changed during the past three months: It is no longer an easy matter to get a new position, and the operatives are more careful, more industrious—more on the job—with the result that there is less spoilage, greater output and smaller overhead on each article.

It is thus, once more, possible to gauge the cost figures with a reasonable degree of accuracy. The material cost can be ascertained with close approximation. The output can be counted on with little variation.

In other words, we are back to the point where we are not forced to guess at costs—and guessing always involves a much higher differential for safety purposes.

Now as to the stability of the present tool prices.

These have been figured on a much smaller percentage of profit than was possible during the period of inflation. They have been figured on the basis of the Steel Corporation prices for steel and on the new scales for operatives, both of which may reasonably be expected to remain fairly stable until next Fall, at least.

There should, therefore, be no hesitancy on the part of the buyers of tools to place orders for fair amounts without further delay.

So far as the stock situation is concerned, it is an admitted fact that both wholesale and retail stores have very small stocks of tools on hand and little or nothing to come, and it is also fair to assume that unless there is to be no business at all during the coming Spring and Summer, somebody will have to run the risk involved in making up a stock on which the wholesalers and retailers may draw.

Why should the manufacturer be forced to bear that risk alone?

If he is to take the entire responsibility, it is certain that the wholesalers and retailers will have to pay the cost of that responsibility—and that means higher cost prices in the long run for them.

### ***Urges Radical Reductions to Clear Stock.***

Widespread cutting of prices in retail stocks after next week is predicted by J. H. Tregoe, executive secretary of the National Association of Credit Men, in his January letter to the 33,000 manufacturers, jobbers and bankers who comprise the membership of that institution which has affiliated organizations in 130 cities throughout the country.

Discussing the retail merchants, Mr. Tregoe declares that they have not followed the initiative taken by manufacturers and wholesalers who were quick to realize that the liquidation processes had arrived.

It would have been better if the retail merchants had promptly taken their losses and distributed commodities to consumers while the purchasing power of the latter was still strong, avers the credit authority.

These retail merchants have probably been waiting to ascertain the strength of the holiday trade before reducing their prices, continues the credit man.

The holiday trade has been fair in gift articles, surpassing expectations in some sections, but essential buying has been narrow and the disposition to hold off has been as pronounced as ever, reports Mr. Tregoe.

"The business men of this country must do their utmost to prevent unemployment in the United States during the coming months," writes Mr. Tregoe.

"The problem of preventing unemployment is the serious thing of the moment and should be given earnest attention.

"It is with complete confidence that we approach the dawn of a new year. The inventory season is now here.

"In the taking of the inventory valuation should be made at replacement prices and book losses assumed now rather than deceive ourselves by taking stocks at values that have gone and which will not return.

"It will mean a large shrinkage in many enterprises, but banks and the business world generally are fully informed as to the reason of the shrinkage.

"Despite depression and uncertainty, we take heart in the fact that the capital savings of the year should be as large as in pre-war years.

"The savings fund has largely increased and more people than ever before are now drawing interest on their savings. The potential buying power of the nation has diminished but little.

"The present period is recuperative and by exercising good sense, we can keep industries moving in a moderate fashion, and our people generally employed, notwithstanding the disabilities in our foreign trade."

### ***Show the Price Tags.***

Put the price tags on the articles on display.

It is true that some dealers do not believe this plan best, but their arguments never have held good with many other dealers, and never at all with the buying public.

Some dealers go so far as to turn the figured side of the tag on an article, shown in a display window, away from the view of the passer-by and the gazer-in, purposely to prevent him from seeing what the goods will cost him.

To many that is almost an insult.

How many times have we seen pedestrians, who had stopped in front of a display window, craning their necks and almost standing on the heads trying to see what was written on a tag, which had purposely been turned, so that the price was not visible.

Sometimes the tags are tucked away under the article bearing it, so that there absolutely will be no chance for the public to form an idea of the cost of the goods.

### ***Talk for Your Goods.***

Showcase goods can't very well walk up to a caller and greet him with a human smile.

They are so many deaf and dumb goods and can only be judged by surface appearances at first.

A salesman can smile for them.

He can express by his good cheer some of the latent cheer in those goods.

# Good Ideas for Window Display

*Practical Lessons from Exhibits in AMERICAN ARTISAN AND HARDWARE RECORD Window Display Competition.  
How to Get More Passers-By to Come into Your Store.*

## WINDOW DISPLAY OF GARDEN TOOLS IS SUGGESTIVE.

Undoubtedly, one of the best ways to sell goods is to show how they can be used.

More or less instinctively, we picture to ourselves what we are going to do with the things we buy.

Seldom, if ever, does a customer purchase a commodity with no thought of the uses to which he can put it.

Consequently, in order to create buying desire in the minds of prospective customers, it is wise always to

with the result that the space would be jammed with scores of articles all coming into the field of vision of the passer-by at the same time.

The effect of such a profusion of articles would be that no particular commodity would stand out in sharp focus at the first glance.

This undesirable consequence is avoided by Miss Jenison in the display under discussion.

She contrives to present a single impression, namely, the impression of garden tools in general.

Moreover, her display has the virtue of suggesting



Window Display of Garden Tools Arranged by Miss Edna L. Jenison, for Petersen Brothers, Incorporated, 7905-7 Third Avenue, Brooklyn, New York. Awarded Honorable Mention in AMERICAN ARTISAN AND HARDWARE RECORD Window Display Competition.

suggest the practical utility of the articles offered for sale.

As a rule, the most gainful window displays are those in which there is a strong suggestion along these lines.

Praise is due, therefore, to Miss Edna L. Jenison for embodying this principle in the window display of garden tools, pictured in the accompanying illustration.

This exhibit was arranged by her for Petersen Brothers, Incorporated, 7905-7 Third Avenue, Brooklyn, New York, and was awarded Honorable Mention in AMERICAN ARTISAN AND HARDWARE RECORD Window Display Competition.

The first thing to be observed in this clever window display is the simplicity of its design.

There is no crowding of goods in the arrangement.

The natural impulse would be to put into the window a sample of every kind of garden tool carried in stock,

actual use and advantages to be derived from such actual use.

In the brief description which came with her photograph of the window display, she describes the layout as follows:

"The background was an artificial stone wall made by covering a frame work of wood with gray crêpe paper and marking off the irregular stones with black show-card ink.

"On the corner posts are flower boxes filled with artificial flowers and vines.

"The floor of the window was covered with green crêpe paper to represent the lawn.

"The rose trellis in the corner was painted dark green and covered with the vine of roses, which were made of crêpe paper.

"The hose is attached to a faucet in the stone wall and from the nozzle of the hose to the trellis is a fine



spray of water made by running white threads back and forth from the trellis to the nozzle.

"The girl pushing the lawn mower gives the garden a realistic effect."

The placards at either end of the window do not distract from the general effect. On the contrary, they serve to convey the impression of adequate supplies of garden tools within the store. The placards are brief, well worded, and attractively composed.

Needless to say, this window display proved itself on the sunny side of the ledger in agreeable increase of profits from the sales directly traceable to its influence.

### **Window Display Competition Is Road to Improvement.**

No one knows how many centuries it took for mankind to develop from the stone hammer age to the powerful-drop forge process of the present day.

It is a certainty, however, that countless millions of minds contributed their share to the slow unfoldment of talent, skill, and experiment which led the artisans of the race to the achievement of our day.

No one man or set of men at any period of the long evolution originated, devised, or invented, by their unaided efforts any of the things which we now have.

The alphabet seems a simple combination of letters out of which to make words form languages. It grew from crude pictures scrawled on the walls of caves into idioms perfect enough for Homer and Shakespeare.

Innumerable units of thought and study throughout ages are in that easy alphabet.

So it is with everything that we have and are.

We depend on others for thought and food and music and comfort and coal and lead pencils and hammers and laws and life and everything that enters into life.

Indeed, we make our biggest progress by recognizing these facts and widening our range of contact with our neighbors and business associates.

In business as well as in science and art we learn from others.

That is the big reason back of AMERICAN ARTISAN AND HARDWARE RECORD Window Display Competition.

It is intended to train dealers and their sales folk in learning how to profit by the experiences and successes of others in window advertising.

It supplies the motive for action and comparison.

Without that motive, few would take the trouble to improve their window displays.

It is from this angle that you are invited to participate in this contest.

Examine the examples of successful window displays published weekly in these columns.

Compare your own work with them.

Find out in what respect your window advertising is weak or defective.

Plan and carry out new window displays in which these defects are corrected.

Submit the window displays with photographs and written descriptions thereof to AMERICAN ARTISAN AND HARDWARE RECORD Window Display Competition.

The rules governing this competition are free from complications of any sort. Here they are:

#### **Award of Prizes.**

The prizes will be awarded as follows:

First prize, \$50.00 in cash, for the best photograph and description received of window display of hardware or kindred lines;

Second prize, \$25.00 in cash, for the photograph and description second in merit;

Third prize, \$15.00 in cash, for the photograph and description third in order of excellence;

Fourth prize, \$10.00 in cash, for the photograph and description fourth in degree of worthiness.

#### **Conditions of Competition.**

The conditions of the competition are as follows:

The photograph must be accompanied by descriptions of how the window displays were arranged and the materials used. The description is important and hence should be adequate. These photographs and descriptions may be sent by mail or express, charges prepaid, and must reach this office not later than February 15, 1921. Address all photographs and descriptions to AMERICAN ARTISAN AND HARDWARE RECORD Window Display Competition, 620 South Michigan Avenue, Chicago, Illinois.

Each photograph and description must be signed by a fictitious name or device and the same name or device must be put in a sealed envelope containing the real name and address of the contestant. This sealed envelope is to be enclosed with the photograph. Contestants are permitted to enter as many photographs of displays as they please.

A Competition Committee of three will be appointed. One of them will be an expert window dresser and one an experienced hardware man. This Committee will pass upon the merits of all photographs and descriptions received, without knowing the names or addresses of the senders, and will decide the winners of the Competition.

AMERICAN ARTISAN AND HARDWARE RECORD reserves the right to publish all photographs and descriptions submitted.

### **Says AMERICAN ARTISAN Is Excellent.**

TO AMERICAN ARTISAN AND HARDWARE RECORD:

I am going to Europe in the early Spring to stay there.

It is with great pleasure that I have read your clear and excellent paper every week for two years, and I wish it the greatest success.

Sincerely yours,

S. A. HESSLER.

Jamestown, New York, January 4, 1921.

### **Culver, Ind., Hardware Dealer Dangerously Wounded by Bank Robbers.**

Jacob Russell Saine, one of the leading hardware dealers in Culver, Indiana, is at the point of death as a result of a bullet wound in his neck received in a fight with five robbers who attempted to hold up the State Exchange Bank of that city, Wednesday, December 29th.

### **Texas Hardware Company Votes Increase of Capital Stock.**

The F. W. Heitmann Company, Houston, Texas, at a special meeting of the stockholders, increased its capital stock, by unanimous vote, from \$500,000 to \$1,000,000 by declaring a 100 per cent stock dividend.

This Company was incorporated December 31, 1902, and its affairs have continuously prospered. This is the first increase in its capital stock since incorporation.

The Company has also acquired by purchase the property which it has occupied continuously for over a quarter of a century. It has entrances on Main Street, Franklin Avenue and on Fannin Street, extending through the block from Main Street to Fannin with an outlet on Franklin Avenue.

This business was founded by F. W. Heitmann, in 1865, during all of which time it has never changed location from the block where first established.

### **Veteran St. Paul Hardware Wholesaler Retires from Active Work.**

Jesse A. Gregg, president of Nicols, Dean & Gregg, wholesale hardware, Saint Paul, Minnesota, retired as president of the Company on January 1st and was succeeded by William J. Dean, now Vice-president and Treasurer.

Mr. Gregg will remain associated with the Company and will have his office there, but will not be active.

Mr. Gregg entered the employ of the Company in 1872 as an office boy. The name was then Nicols, Berkey Company and later became Nicols, Dean & Company. Mr. Gregg was born in Morgantown, West Virginia, 67 years ago and came west when he was eleven years old.

Sidney Dean succeeds E. J. Dean as Vice-president and W. W. Dean is Treasurer.

### **Old Chicago Nail Company Plant To Be Soup Making Factory.**

By a deal which has just been closed, the plant which was originally occupied by the Chicago Nail Company at Hammond, Indiana, is now to be used for the making of soups and other canned foods, the John Campbell Company, Camden, New Jersey, having purchased the land and buildings, comprising a tract of sixteen acres and eleven manufacturing buildings. In recent years it was operated as a canning factory by Reid, Murdoch & Company, Chicago, wholesale grocers.

### **Income Tax Returns May Be Based on Cost or Market, Whichever Is Lower.**

Merchants and manufacturers may adopt "cost or market, whichever is lower," as a basis for valuing their inventories for 1920 income tax returns under regulations issued December 30, 1920, by the Bureau of Internal Revenue.

The regulations also provide that the difference caused by the fall of prices during the year may be deducted in arriving at the value of stock.

Internal Revenue Bureau officials explained that the law permits of a choice of basis, and under present

conditions "market" reflects more accurately the state of business conditions. To require inventories at a cost higher than "market," it was added, would be to put a tax on investment rather than on income.

Under ordinary circumstances "market" is defined by the regulations as meaning the current bid prices prevailing at the date of the inventory for the particular merchandise in the volume in which ordinarily purchased by the taxpayer.

The regulations, however, further provide that where, owing to abnormal circumstances, the taxpayer has regularly sold such merchandise at prices lower than the current bid price, the inventory may be valued at such prices.

Inventories of taxpayers on whatever basis taken will be subject to investigation, the Revenue Bureau announced.

Taxpayers are permitted under the regulations to value their inventories at cost or market, whichever is lower, regardless of past practice, but in the future a change will only be permitted with the consent of the Bureau.

### **Gets Useful Information from AMERICAN ARTISAN.**

TO AMERICAN ARTISAN AND HARDWARE RECORD:

We take occasion of renewing our subscription to say that we like your paper very much and get some valuable information out of it.

Very truly yours,

PERRYVILLE HARDWARE CO.

Perryville, Missouri, December 31, 1920.

### **Trade Opportunities in Foreign Lands.**

The Bureau of Foreign and Domestic Commerce through its Special Agents, Consular Officers and Commercial Attachés, is receiving information of opportunities to sell hardware and kindred lines in several foreign countries. Names and locations will be supplied on request to the Bureau in Washington or its District Offices. Such requests should be made on separate sheets for each opportunity, stating the number as given herewith:

34190.—A mercantile company in Guatemala desires to be placed in communication with manufacturers of cheap scissors, made of iron 6 to 7 inches long; tablespoons, teaspoons, forks, and knives, of cheap metal with a good nickel finish, etc. Illustrated catalogues and quotations are requested. No reference offered.

34194.—Merchants in Jamaica who have recently suffered great losses by fire are desirous of replenishing their stocks and are in the market for hardware.

34198.—A firm of commercial representatives in South Africa desires to secure the sole agency for the sale of general merchandise. References.

34227.—The representative of a company in North China is in the United States and desires to secure an agency for the sale in Mongoli and North China of farming implements, iron and steel products, etc. Reference.

34230.—A firm of importers in India desires to secure the representation of manufacturers and exporters for the sale of hardware, cutlery, etc. Quotations should be given c. i. f. Indian port. Payment to be by 30 days' sight drafts. No reference offered.

34231.—An importing firm in Sweden desires to purchase and secure an agency for the sale of iron and brass machine screws with whitworth threads, iron and brass wood screws, locks, etc. Reference.

34246.—A gun-club society in Peru desires to purchase 80 rifle-range targets, and requests catalogues and prices.



34248.—A mercantile company in China desires to secure an agency for the sale of all merchandise which may be sold in Chinese markets. Quotations should be given c. i. f. Chinese port. Terms: Mostly 30 to 90 days sight drafts, delivery against acceptance.

## Coming Conventions.

Texas Hardware and Implement Association, Adolphus Hotel, Dallas, Texas, January 18, 19, and 20, 1921. A. M. Cox, Secretary, 1808 Main Street, Dallas, Texas.

Western Retail Implement Vehicle and Hardware Association, Kansas City, January 18, 19 and 20, 1921. H. J. Hodge, Secretary, Abilene, Kansas.

Pacific Northwest Hardware and Implement Association, Seattle, Washington, January 18, 19, 20 and 21, 1921. E. E. Lucas, Secretary, Hutton Building, Spokane, Washington.

Missouri Retail Hardware Association, Planters Hotel, St. Louis, Missouri, January 25, 26 and 27, 1921. F. X. Erer, Secretary, 5106 North Broadway, St. Louis, Missouri. Becherer, Secretary, 5106 North Broadway, St. Louis, Missouri.

Mountain States Hardware and Implement Association, Brown Palace Hotel, Denver, Colorado, January 25, 26, 27, 1921. W. W. McAllister, Secretary-Treasurer, Boulder, Colorado.

Indiana Retail Hardware Association, Athenaeum Hall, Indianapolis, Indiana, January 25, 26, 27 and 28, 1921. G. F. Sheedy, Secretary, Argos, Indiana.

Oregon Retail Hardware and Implement Dealers' Association, Portland, Oregon, January 25, 26, 27 and 28, 1921. E. E. Lucas, Secretary, Hutton Building, Spokane, Washington.

Kentucky Hardware and Implement Dealers' Association, Louisville, Kentucky, January 25, 26, 27 and 28, 1921. J. M. Stone, Secretary, Sturgis, Kentucky.

American Society of Heating and Ventilating Engineers, Philadelphia, Pennsylvania, January 27, 27 and 28, 1921. Casin W. Obert, Secretary, 29 West 39th Street, New York City.

West Virginia Retail Hardware Dealers' Association, Huntington, West Virginia, February 1, 2, 3, 1921. James B. Carson, Secretary-Treasurer, Dayton, Ohio.

Nebraska Retail Hardware Association, Hotel Rome, Omaha, Nebraska, February 1, 2, 3 and 4, 1921. George H. Dietz, Secretary, Lincoln, Nebraska.

Sheet Metal Contractors' Association of Indiana, February 2, 3 and 4, 1921, Indianapolis, Indiana. Ralph R. Reeder, Secretary, 314 East Sixteenth Street, Indianapolis, Indiana.

Wisconsin Retail Hardware Association, Milwaukee, Wisconsin, February 2, 3 and 4, 1921. P. J. Jacobs, Secretary, Stevens Point, Wisconsin.

Oklahoma Hardware and Implement Association, Oklahoma City, February 8, 9 and 10, 1921. W. B. Porch, Secretary-Treasurer, Oklahoma City, Oklahoma.

The Michigan Retail Hardware Association, Grand Rapids, Michigan, February 8, 9, 10 and 11, 1921. Arthur J. Scott, Secretary, Marine City, Michigan.

North Dakota Retail Hardware Association, Fargo, North Dakota, February 8, 9, 10 and 11, 1921. C. N. Barnes, Secretary, Grand Forks, North Dakota.

Pennsylvania and Atlantic Seaboard Hardware Association, Incorporated, Convention and Exhibition, Philadelphia Commercial Museum, Philadelphia, February 8, 9, 10, 11, 1921. Sharon E. Jones, Secretary, 1314 Fulton Building, Pittsburgh.

Illinois Retail Hardware Association, Hotel Sherman, Chicago, Illinois, February 15, 16 and 17, 1921. Leon D. Nish, Secretary, Elgin, Illinois.

California Retail Hardware and Implement Association, San Francisco, California, February 15, 16 and 17, 1921. LeRoy Smith, Secretary, 112 Market Street, San Francisco, California.

Minnesota Retail Hardware Association, St. Paul Auditorium, St. Paul, Minnesota, February 15, 16, 17, 18, 1921. H. O. Roberts, Secretary, Metropolitan Life Building, Minneapolis, Minnesota.

Ohio Hardware Association, Columbus, Ohio, February 15, 16, 17 and 18, 1921. Hotel Headquarters, Deshler Hotel. Exhibition in Memorial Hall. James B. Carson, Secretary, Dayton, Ohio.

New England Hardware Dealers' Association, Mechanics' Building, Boston, Massachusetts, February 21, 22 and 23, 1921. George A. Fiel, Secretary, 10 High Street, Boston, Massachusetts.

Virginia Retail Hardware Association, Petersburg, Virginia, February 22, 23 and 24, 1921. Thomas B. Howell, Acting Secretary, Richmond, Virginia.

Michigan Sheet Metal Contractors' Association, Hotel Durant, Flint, Michigan, February 22, 23 and 24, 1921. F. E. Ederle, Secretary, 1121 Franklin Street, S. E., Grand Rapids, Michigan.

Iowa Retail Hardware Association, Savery Hotel, Des Moines, Iowa, February 22, 23, 24 and 25, 1921. A. R. Sale, Secretary-Treasurer, Mason City, Iowa.

New York State Retail Hardware Association, Roches-

ter, New York, February 22, 23, 24 and 25, 1921. John B. Foley, Secretary, 607 City Bank Building, Syracuse, New York.

South Dakota Retail Hardware Association, Sioux Falls, South Dakota, February 22, 23, 24, 25, 1921. H. O. Roberts, Secretary, Metropolitan Life Building, Minneapolis, Minnesota.

National Warm Air Heating and Ventilating Association, Cleveland, Ohio, April 19 and 20, 1921. Allen W. Williams, Secretary, Columbia Building, Columbus, Ohio.

Western Warm Air Furnace and Supply Association, Sioux City, Iowa, May, 1921. John M. Hussie, Secretary, Omaha, Nebraska.

Panhandle Hardware and Implement Association, Amarillo, Texas, May 8, 9 and 10, 1921. Troy Thompson, Secretary-Treasurer, Dalhart, Texas.

Hardware Association of the Carolinas, Charlotte, North Carolina, May 10, 11, 12 and 13, 1921. T. W. Dixon, Secretary-Treasurer, Charlotte, North Carolina.

Southeastern Retail Hardware and Implement Association (composed of Alabama, Florida, Georgia and Tennessee), Atlanta, Georgia, May 17, 18, 19 and 20, 1921. Walter Harlan, Secretary, 701 Grand Theater Building, Atlanta, Georgia.

Sheet Metal Contractors' Association of Ohio, Hotel Gibbons, Dayton, Ohio, July 19, 20, and 21, 1920. William J. Kaiser, Secretary, 123 East Chestnut Street, Columbus, Ohio.

Southern Stove Manufacturers' Association, Hotel Seelbach, Louisville, Kentucky, March 1, 1920. W. H. Cloud, Secretary, 216 Glendora Avenue, Louisville, Kentucky.

## Retail Hardware Doings.

### Arkansas.

The Hayes-McKean Hardware Company will expand its business by occupying the building vacated by the Variety Store in addition to their present quarters in DeQueen.

### Iowa.

Carl Rothe made a deal recently whereby he became the owner of the F. J. Kuester Hardware and Implement store at Lyman.

Workman and Company, hardware firm, has changed hands at Castana. A deal has been completed whereby the business has been exchanged for land near Lincoln, Nebraska. The new proprietor will be a Mr. Ehlman.

### Kansas.

George Kaup has moved his stock of implements to the building known as the Butler, west of the Griffiths and Sons grocery at Downs.

### Missouri.

The G. W. Robertson hardware store is having a closing out sale and will discontinue the business at Mexico.

Owens and Hughes have purchased the Market Hotel building and have opened in this property a general hardware store to be known as the Farmington Hardware Company at Farmington.

### Nebraska.

J. W. Nohavic, who purchased the Adolph Jelinek stock of implements, has opened up an implement store at Wilber.

G. Rex Heun of Lynch, who has been in the hardware and implement business for the past year has just filed application to be incorporated January, 1921. Mr. Heun who has a majority of stock will be president of the new firm. The firm will be known as the Heun Hardware and Implement Company and its capital will be \$35,000.

### Oklahoma.

Mr. and Mrs. W. E. Wilson have sold their hardware store in Catoosa.

Leonard Kennedy of Sugden purchased a hardware store at Ringling.

D. T. Caspary, R. J. Morrow and F. G. Hetzel have purchased the D. A. Andrews hardware store and will conduct the business under the firm name of the Casmore Hardware Company, at Pawhuska.

### South Dakota.

C. J. Martin is busy superintending the moving of his hardware stock from its old location on Third between Walnut and Cedar to the new place across the alley from the Hentges Clothing Company at Yankton.

### Texas.

Crockett Hardware and Pine Lumber Company of Crockett has been chartered with a capital stock of \$23,300. Incorporators are: D. A. Nunn, H. A. Fisher, and J. S. Cook.

### Wisconsin.

Mrs. G. A. Hanson sold the Hanson Hardware store to O. T. Traiser at Osceola.

Ralph M. Burtis Company, hardware concern, has changed its name to the Stillman Hardware Company and increased its capital from \$12,000 to \$25,000 at Oshkosh.

A. D. Burnett sold his hardware business at Spooner.

# Advertising Help and Comment

*Send Us Copies of Your Advertisements. Let Us Help You Get Bigger Results by Advice and Suggestions. The Service Is Free. Don't Hesitate to Take Advantage of It.*

From the point of view of type and make-up there is little cause to find fault with the advertisement of Carey Hardware, reproduced herewith from the *Raton Reporter*, Raton, New Mexico.

The name and address of the firm in white letters on black background stand out sharply from the printed page.

The design is sufficiently individual to identify the business in the minds of readers of the advertisement.

black and white title of the firm and the heavy black border, in conjunction with the contrast afforded by the liberal use of white space.

Artistically, therefore, the copy pleases the eye without distracting the attention.

If it is the custom of Carey Hardware to publish advertisements containing selling appeal, description, and price quotations, no objection can be brought against the present advertisement.

On the other hand, if the adver-

light globes named in the copy constitute merely a list of goods.

Nothing is said to make any one of the articles in the list desirable.

No statement, however brief, is given of the merits of these goods.

There is not a single hand-hold in any of the lines by which the reader can grip an advantage for himself or herself.

These observations are not made in a spirit of fault-finding for the sake of fault-finding.

Their only motive is to point out what is lacking and to urge the wisdom of getting more benefit out of the space occupied by the advertisement.

\* \* \*

## *Don't Try to Say it All at Once.*

Even the Encyclopedia Britannica can not tell us everything in twenty-nine volumes.

So you would do well to stop trying to describe your entire business in each advertisement.

Make it a point to select one or two leaders in each group of seasonal goods and concentrate your advertisements upon such articles.

People will come to your store if your advertisements are sincere and persuasive.

When they get into your store they will find that the store itself is a living advertisement speaking through the goods on display, through the earnest salesmanship of you and your staff—if you have a store which is not merely a warehouse but a living institution for the service of your customers.

\* \* \*

## *Is Servant of the People.*

Advertising is the servant of the people.

It can not be of value to the advertiser unless it is of value to the public.

Therefore, the retailer should present his goods with fairness, sincerity, and truth through the printed word.

MAJESTIC RANGES
C.V.B. CUTLERY

CAREY HARDWARE

WM. ARKELL, MGR.

GENERAL HARDWARE

PHONE 312
RATON, N.M.

## ALASKA REFRIGERATORS

### White Mountain Ice Cream Freezers

### Royal Vacuum Cleaners

### Westinghouse Electric Irons

## LIGHT GLOBES

It may be taken for granted that this logotype, with its white letters on black background, is used by the firm in all its advertisements.

Thus it becomes, in a sense, the trade-mark of the business.

The advertisement is herewith reproduced full size.

It is easy to perceive, therefore, the relations and balance of its proportions.

The articles mentioned in the advertisement are set forth in letters which are not difficult to read.

Emphasis is derived from the

tisement under consideration is indicative of this firm's regular method of advertising, it is open to some criticism of an adverse kind.

As an announcement of stock on hand, it serves a limited purpose.

But, as a message of goods calculated to answer the needs of customers and give them information regarding the commodities mentioned, it lacks eloquence and power of conviction.

In this view of the matter, the refrigerators, ice cream freezers, vacuum cleaners, electric irons, and



# Warm Air Heating and Ventilating

*Better Installations. How to Sell More Warm Air Heaters.  
Reports of Progress in Warm Air Heater Research Work.  
Ventilating Factories, Garages, Theaters, and Houses.*

## **GILT EDGE SALESMEN HAVE ANNUAL MEETING.**

Because they believe that success in salesmanship comes from harmony and the possession in common of the same spirit, the salesmen of R. J. Schwab and Sons Company, Milwaukee, Wisconsin, meet in yearly conference for exchange of ideas and strengthening of the selling organization.

This year's meeting was held Monday, Tuesday, and Wednesday, January 3, 4 and 5, 1921, in Hotel Martin, Milwaukee.

Officers of the Company and department heads participated in the gathering.

A pleasant banquet was given during the three-day meeting at which talks were made by R. J. Schwab, President of the Company; H. E. Schwab, Vice-President; Tom Johnson, Superintendent of Foundry; Mr. Walters of Advertising Department, Charles Schwab, Treasurer, and others.

Thomas I. ("Gilt Edge") Peacock, Michigan representative of R. J. Schwab and Sons Company, acted as toastmaster and drove Dull Care so far away that, traveling at the rate of 74,000 miles a second, it will take her 347 years to return to Milwaukee.

Story telling by George Murphy and Charlie Markle gave zest to the occasion.

The banquet was followed by a theatre party which was agreeable and refreshing, with just the right admixture of humor.

## **Well Known Warm Air Heater Engineer Joins Buck's as Department Head.**

A. B. Meston, who for many years was in charge of warm air furnace sales in the Mid-West territory for the "Round Oak" people, has joined the forces of The Buck's Stove and Range Company, St. Louis, Missouri, as Manager of the Warm Air Furnace Department, having taken charge January 1, 1921.

Mr. Meston comes to his new responsibilities and opportunities with a fund of knowledge developed through seventeen years' experience as an actual installer and engineer for warm air heating and ventilating apparatus.

In 1903 he bought an interest in a retail warm air heating business at Omaha, Nebraska, and here he had an opportunity, of which he took excellent advantage, to learn all the various angles of the business from the standpoint of the installer. His concern became favorably known in a large section of the country around Omaha for its exceptionally efficient work of installation.

Some years later, Mr. Meston became connected with the Beckwith people as salesman and installation engineer in that territory. He started on his new duties

with the determination to see that sufficiently large heaters were used by his installer customers and rendered them expert assistance in planning the installations—with the result that his sales kept growing at a very satisfactory rate, and also that the class of installation done by his customers came to be very highly regarded.

Mr. Meston has left a fine concern to associate another company of equally high standing and his many friends will no doubt join AMERICAN ARTISAN AND HARDWARE RECORD in wishing every possible success.

## **Grand Rapids Heating and Ventilating Contractors Hold Annual Meeting.**

The annual meeting of the Grand Rapids, Michigan, Heating Contractors' Association was held in the Heysteck & Canfield rooms Tuesday Evening, January 4th. The report of the Treasurer showed the organization to be in good shape financially and well able to take care of the summer outing of the State Association providing it cares to come to Grand Rapids for this event.

Harry Rhodes was re-elected President and Charles Heth, Secretary-Treasurer. These men have been so active and successful in managing the organization that they had no competition. This was the first meeting in the new rooms which are furnished gratis by the Heysteck & Canfield Company. The rooms are certainly beautiful, conveniently located and a distinct credit to the generous spirit of this concern.

## **Issues Catalogue of Registers and Ventilators.**

If it were possible to crowd into a single sentence all the benefits set forth in the 1921 catalogue of the Independent Register and Manufacturing Company, Cleveland, Ohio, it might be said that the products of this company are, in its own words, "First Aid To The Pipeless Furnace."

In this catalogue are briefly but clearly explained the adjustable ceiling ventilators, wall ventilators, smoke pipe registers, double heater registers, and stove pipe thimbles made by the Independent Register and Manufacturing Company. The illustrations are unusually distinct and helpful.

A commendable characteristic of this new catalogue is its freedom from any semblance of exaggeration. The merits of the Company's products are set forth in plain, simple, and convincing language.

Those interested in these products will benefit themselves by writing to the Independent Register and Manufacturing Company, Cleveland, Ohio, for a copy of this 1921 catalogue.

## *Warm Air Heaters Are Approved for Use in Garages By Heating and Ventilating Experts.*

### *Minneapolis City Council Passes Ordinance Permitting Installation of Warm Air Heaters in Public Garages.*

During the summer of 1920 two public garages in Minneapolis were destroyed by fire, and as a result an attempt was made by certain interests inimical to the warm air heater industry to prohibit the use of such apparatus for the heating of public garages in that city. In fact, an ordinance was actually introduced in the Council of Aldermen and was well on its way to being recommended for enactment by the committee which had it in charge, when E. L. Jaines, of the Northwestern Furnace & Supply Company accidentally heard of it.

Mr. Jaines got busy and by liberal use of telegrams and long distance telephone calls, obtained from prominent heating and ventilating engineers statements which showed that so far as fire risk was concerned, the properly installed warm air heater was not only no more dangerous than steam or hot water plants, but that in many features the two latter were less desirable, such as for instance in the matter of heat distribution, ventilation, cost of upkeep, fuel cost.

The two paragraphs in the proposed ordinance to which the principal objections were made by Mr. Jaines and his associates in the campaign read as follows:

"No stove or hot air furnace shall be used or allowed in any public garage, or in any private garage having accommodations for more than three automobiles or trucks.

"The heating of all private garages hereafter erected, with accommodations for more than three automobiles or trucks, and of all public garages hereafter erected, shall be by means of hot water or steam."

It will be readily seen that the enactment in any city of an ordinance containing provisions like those in the two preceding paragraphs would cut off a large por-

tion of the business to which the warm air heater installed is entitled, and would also serve to give the entire warm air heating industry a black eye, because of the natural—even if entirely erroneous—inference that a warm air heater creates a greater fire risk than a steam or hot water boiler.

As stated, Mr. Jaines succeeded in having the two paragraphs referred to changed in such a manner as to permit the use of warm air heaters, both in private and public garages, for which the gratitude of the entire warm air heating fraternity is due to him and those associated with him who so freely gave of their time and money toward the accomplishment of this highly desirable result.

In order that other installers may have full information on the points which may be brought up by opponents of warm air heating apparatus, so far as garage installations are concerned, we publish below excerpts from the letters which were used by Mr. Jaines and his volunteer aids in their fight in Minneapolis:

On the matter of danger from explosive gasoline mixtures or gases, J. V. Martenis, Associate Professor of Mechanical Engineering, University of Minnesota, has this to say:

"I have discussed this question with others to learn what their judgments are regarding the probabilities of the formation of an explosive

gasoline mixture in a garage which condition might make it dangerous to install a warm air furnace for heating the garage, and I find that all agree that there is no sound reason why such a condition should occur.

"I can easily realize that all possible safeguards should be observed in the installation of any heating plant to be used in a garage because of the naturally

**The Warm Air Heater has been approved by leading heating and ventilating engineers as a safe apparatus for the heating of private and public garages.**

**The Warm Air Heater has these distinct advantages over any other heating apparatus for garages when properly planned and installed:**

**(1) It provides circulation of the air which employes must breathe, which neither steam nor hot water systems do.**

**(2) It sends the fresh, warm air toward the floor, thus producing more comfort than the steam or hot water systems, because the latter permit the air heated by radiation or "contact" to rise from the floor along the cold walls instead of diffusing it, thus causing the upper part of the garage—immediately under the roof, where no one is working—to be hotter than any other portion of the building.**

**(3) It costs considerably less to install than either hot water or steam systems.**

**(4) It costs less to maintain because there are fewer parts to wear out than either hot water or steam systems.**

**(5) It furnishes more heat to the actual working portion of the garage for a smaller amount of coal.**

**(6) It requires no licensed boiler engineer to operate, while in many cities such a man must be employed where hot water or steam systems are installed.**



dangerous attributes of gasoline.

"If the intake air is taken from the outside or even recirculated from the inside when the return register is located at a point above the floor line and the warm air is delivered well above the floor line, a warm air furnace could safely be used for heating a garage."

Mr. Jaines made several demonstrations with gasoline to prove this statement. For example, he heated a soldering iron to red heat and inserted it in a can of gasoline, without causing any explosion. He also threw gasoline against the fire chamber of a warm air heater with a big fire of live coals, without causing an explosion.

Hans J. Meyer, of the Charles Pillsbury Company, Minneapolis, which serves as heating engineers for the state of Minnesota, makes the following statement:

"After giving this matter careful thought and consideration it is my conviction that a warm air furnace can not be considered a fire hazard in garages, even should air be recirculated, and when the warm air furnace is installed in a fireproof compartment having an entrance from the outside only, all possible objection to such an apparatus by the fire underwriters should be removed.

"It would seem to me that a steam or hot water boiler installed in the basement of a garage to which room air from the garage might be drawn would offer a greater fire hazard, if any existed, than would a warm air furnace. The suction draft created by even a moderately high chimney when windows and doors to the furnace room are closed, the air being drawn down stairways or openings into the fire chamber to support combustion, would be greater than the draft produced by a warm air furnace such as is usually installed, and if the condition holds good, that combustible gases from the garage are present, then as they come in contact with the live fire, they might produce an explosion in the fire box."

E. B. Langenberg, Secretary of the Haynes-Langenberg Manufacturing Company, St. Louis, Missouri, and chairman of the Warm Air Furnace Committee of the National Association of Sheet Metal Contractors, gave hearty cooperation to Mr. Jaines and his associates and wrote to a number of heating and ventilating engineers requesting their professional opinion on the following features of the ordinance as amended:

(1) The enclosing of any and all heating apparatus in a fireproof room with entrance and exit from outside only.

(2) Where a warm air furnace is used, the air shall be taken from the outside or roof.

(3) Where a warm air furnace is used there shall be provided a ventilating duct equipped with a fan to remove all foul or explosive gases.

To this letter Professor A. C. Willard, of the College of Engineering, University of Illinois, sent the following telegraphic reply:

"Recommend all heater rooms be fireproof with outside doors only. Recommend positive exhaust ventilation of all garages by fans during heating season whether direct steam or water or recirculated air is used for heating.

"Recommend recirculation with warm air furnace system. Leakage of outside air into building will nec-

essarily take place with exhaust ventilation system at work and if ventilation is sufficient to maintain safe air conditions for employes to work in, it will be entirely safe for recirculated furnace heating system."

From Ernest L. Ohee, Professor of Mechanical Engineering, Washington University, St. Louis, Missouri, replied as follows:

"Concerning paragraph 3—There is no more reason why a ventilating duct and fan should be applied to garages heated by hot air than those heated by any other system. The amount of noxious gases would be the same in any system, and the ruling should apply equally to all systems.

"Concerning paragraph 2—If the ventilating duct and fan are applied, there is no necessity for the warm air furnace taking its air supply from the outside or roof.

"If no such duct is installed it is conceivable that there might be a concentration of explosive mixture sufficient to be ignited by the temperature of the furnace heating surface, although this is highly improbable. As stated above, the danger from the noxious gases would be exactly the same, whether the heating was by direct steam or hot water or by warm air."

### ***Veteran Furnace Manufacturer Forms New Connection.***

After many years of high service to the trade as a furnace manufacturer under his own name in Chicago, Charles Smith has formed a connection with the Grey Iron Foundry Company, Muskegon, Michigan, and organized under the firm name of Smith-Grey Heater Company.

This newly formed Company has recently installed machinery to meet the increased demand for its special lines, and is now in position to serve customers even better than in the past.

The products are shipped from Muskegon at night by boat, and transferred the next morning to any railroad in Chicago or to any part of the city.

The Chicago office of the Smith-Grey Heater Company is located at 7335 Vincennes Avenue, where an ample stock of water heaters for combination heating and heaters for schools is always accessible.

Charles Smith is president of the Smith-Grey Heater Company, G. H. Reed, is vice-president; E. L. Meier is treasurer, and W. A. Meier is secretary.

### ***Take Time to Have Good Time.***

A merchant who has no time to take a vacation, no time to secure recuperative recreation, no time to have a good time once in a while, no time to read his trade papers to learn of what others are doing, no time to do anything but "grub along," is making a very great mistake.

He should learn that he is in business for life. If more merchants would get that through their noodles the business of the merchant would be different.

It is not only for today that we are working, but for "tomorrow, and tomorrow, and tomorrow."

A builder very carefully lays the foundations of his structure before he begins to build it. The merchant should do the same thing.

# Practical Helps for Tinsmiths

*No Two Jobs Are Exactly Alike. Therefore, the Sheet Metal Worker Has to Meet Each Difficulty as It Comes. Send Your Problems to Us. Let Our Experts Help You.*

## PATTERNS FOR GRAIN HOPPER.

By O. W. Kothe, Principal St. Louis Technical Institute and Instructor in the David Rankin, Jr., School of Mechanical Trades, St. Louis, Missouri. Written especially for American Artisan and Hardware Record.

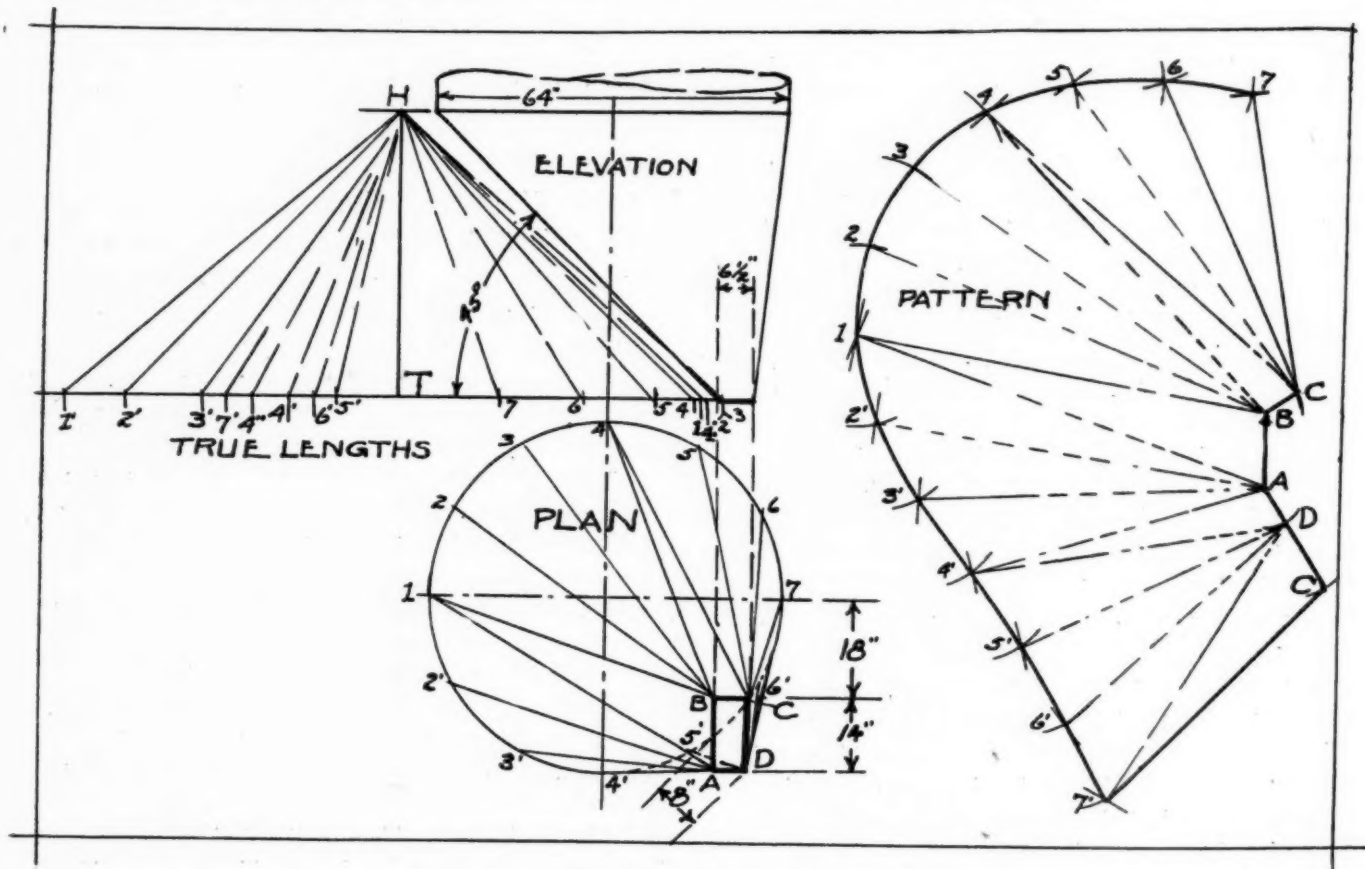
Answering the inquiry of Mr. J. M. Campbell, of Lincoln, Nebraska, for layout of a grain hopper according to sketch submitted, and not knowing if this position of bases is the correct interpretation of the plan or not, I have sought to get further information,

and draw lines to the corners of rectangle as shown.

Now by erecting lines from rectangle of plan we cut the 45 degree line of elevation and this enables us to establish the height H-T.

After this the problem is treated identically line a square to round transition.

The plan lines are picked and transferred to diagram of true lengths, placing the straight number as B-1-2-3-4, etc., to the right of T and the numbers as A-1-2'-3'-4', etc., to the left of T.



Pattern for Grain Hopper.

but even at that the correspondent's drawing is not any clearer, since his measurements indicate one thing and his drawing indicates another.

But working to the measurements, as the Plan and Elevation in the attached drawing I get that position, and if it is not correct, then the workman must adjust the measurements and positions to suit his work.

Whatever this makes, the working out by triangulation would be the same as in this case.

By reference to a 45 degree line on the plan I take it the heel of Elevation is to slant that much.

So draw this slant of elevation and measure over the great diameter and then draw the plan, placing the rectangle base as measurements work out as A-B-C-D in this case.

Divide the round base in any number of equal parts

Then by drawing lines to H, we have the true lengths.

The reason for doubling over of the numbers it makes it easier to keep track of your lines, and it is a most difficult matter to work the numbers backwards while developing the patterns.

The pattern is set out the same as any ordinary square to round, only working each half separately.

In this case we start with the heel A-I-B and work each way.

The matter of placing the seams is left to the workmen.

But it may be best to lay the full pattern off on a large piece of paper, and then punch off the patterns, making the seams where you want them, and always allowing laps for riveting extra.



# Every Good Mechanic Gets Paid for What He Knows Because His Craftsmanship Results from Knowledge.

*If You Cannot Go to School to Acquire More Knowledge,  
You Can Have the School Brought to You by Correspondence.*

Written Especially for AMERICAN ARTISAN AND HARDWARE RECORD by J. C. Greenberg,  
Peoria, Illinois.

(Copyright, 1921, by J. C. Greenberg.)

It was on a rainy Saturday afternoon when I entered the sheet metal shop owned by Jim Crowe.

As soon as I was inside, I became aware that Jim and one of his ex-employees were having a strong word battle.

It seems that Jim had fired this fellow the day before, and he had just come in for his pay. The fellow's name is Jones, and he was some cusser.

Oh, Boy! He just laid it down to Jim, till it made me sore. Jim is a fine fellow, and as square as a die. I could not see him being abused.

Jones knew me because I have seen him in several shops before, and he was fired from each place he has ever worked at.

After Jim has paid him off, and both of them cooled down, I began to ask what the matter was. Jim said:

"Jones is a good fellow, but I can not afford to pay him one dollar an hour for the kind of work he does. He seems to know how to start any kind of a job you give him, but most of them have a bum finish.

"It cost me more money to do his work over than I realized in profit on him as a workman," he added. "I simply can not afford to keep him."

I then turned to Jones and asked him what kick he had coming, so he said to me:

"Jim expects a man to know everything about the business. There is not a man in this shop who knows it all. Even the foreman does not know it all.

"I am only a common tinner," he continued. "I had no chance to go to school and learn the fancy kinks of the trade, and I never tell a boss that I know everything. Now Jim gets sore because I fell down on a couple of jobs that takes a college professor to figure out.

"I am not an adding machine am I?" he asked. "Then Jim gets sore and calls me down something fierce and fires me. Can you beat it?"

I told him I could beat it, and I did too. While this was going on, the other three men came up to listen.

I guess all men love to listen to an argument. It is a natural thing. Anyhow, I told him that I could beat it, and I proceeded to lay down the law of common sense to both of them. I said:

"Boys, you are both wrong. You Jim, need a man, and Jones needs a job. There is no use in firing Jones, because if you do, he will only get another job to fall down on, and get fired again.

"Jim, it is your duty as an employer to help your employees. Firing is no remedy. It only makes matters worse for both of you.

"The trouble with you Jim is that you want a man to do things that you know he can not do. It is you who fall down by misplacing a workman. You should keep Jones busy at the things that he can do best. If you do this, you will both make money. If you work for mutual interest, you will look at what Jones can do. But if you lose sight of that interest, you look for what Jones can not do.

"You judge him that way, and of course you must fire him. You have a wrong method. You do not cooperate with Jones."

Then turning to Jones I said:

"Jones sit down. I want to tell you something that will keep you at work right here in

Jim's shop. I want to tell you that you are not fired, because when Jim hears what I have to say, he will be glad of it. Just sit down, keep your feet warm, and your head cool, and listen good."

When Jones was seated, and we all lit cigars which I brought with me, I turned to Jones and the other fellows and said:

"Jones, when you went to work here, did you say that you were only a common tinner or did you say that you were a real guy.

"You need not answer this," I said, "because it may make you feel bad. You did, however, ask how much Jim pays good tinner. He told you one dollar per hour, and you agreed to work. Under this man-to-man agreement, you were supposed to do the same class of work as these men here are doing. You fell down on the quality of your work. Jim was paying you for

**JONES was fired from every place he had ever worked.**

**He was only a common tinner, as he himself expressed it, and had no chance to go to school and learn the fancy kinks of the trade.**

**Until he met Greenberg, he had the idea that he could not improve in his talent and skill by studying after working hours.**

**He had an idea that Correspondence Schools were no good.**

**His case is typical. The good mechanic gets paid for what he knows. Nowadays knowledge is within the reach of all. Therefore all can become good mechanics.**

what you were supposed to know. You did not know what you should know, and Jim got sore and fired you.

"Suppose you were the boss, and had to face the same thing, what would you do?" I asked him. "However, Jones, this is neither here nor there. You admitted a little while ago that you did not know it all. It follows that you should know more in order to be classed as a first class mechanic.

"You said that you had no chance to educate yourself in the higher things about the business," I continued. "You call them 'fancy kinks' but in reality you mean real honest to goodness knowledge. You realize that you do not know as much about sheet metal work as you should know. Now Jones, I will give you credit for doing your very best. You were honest about it, but you can see that the best you can do is not good enough. Am I right Jones?"

"Yes I guess you are," frankly admitted Jones.

"Now then," I continued, "you also said that you never had the chance to learn the things you wanted to learn. There are millions like you who had to quit school and go out after bread and butter at the age of twelve. This is no disgrace. But the disgrace is in the fact that you actually refused an education after you became a man and saw that you needed it badly."

"I can't agree with you on this," argued Jones. "How can I get an education when I have to work all day. All this clatter is bunk."

"No it is not bunk," I insisted. "If you can not go to school to educate yourself, make the school come to you."

"What do you mean make the school come to me?" asked Jones.

"I mean," I answered, "that you get in on a correspondence course in a legitimate school which teaches sheet metal and do some tall studying. Learn your trade right. If you really want to learn and progress, and to become a better workman, there is always a good chance for you. You are earning good money, your evenings are your own, you have a brain to use, what more do you want? As soon as you finish such a course, you will be able to look any job in the face and say to yourself, 'I know how to do this job.'"

"Nothing doing," hastily answered Jones. "No correspondence schools for me. All you can learn through the mail you can put in your eye. They are all the bunk. Show me one man who ever got any good out of that kind of a school?"

Just then Bill Cooper spoke up and said:

"Jonsey old man, I finished up a correspondence course last year and got a foreman's job in this very shop on the strength of it. I have put in many nights of pleasant study with the St. Louis Technical Institute. You know the problems in the AMERICAN ARTISAN AND HARDWARE RECORD every week called 'Practical Helps For Tinnners?'

"Well, Mr. O. W. Kothe writes them, and he is the principal of this institute. Believe me Jonsey, I owe that school many thanks because they have really made me what I am. You need not scoff at correspondence schools, they are all right and a blessing to the man who really has ambition."

"There you are Jones," I said with great satisfac-

tion, "here is a man you actually know who says that correspondence school is O.K."

Jones did not say a word. He was thinking hard. He was beginning to see the light of a chance to improve.

"Here is how the matter stands Jones," I persisted. "You know that you don't know it all. Your boss knows it, too, and yet you are taking the same pay as the man who does know it all. Do you call this a square deal to yourself and your boss?"

"No. Not the way you put it, it isn't," reflected Jones.

"Now Jones," I continued, "if you are on the square with yourself, I will bet a new hat that at the end of a month you will be worth more to yourself than you are today. You will hold your job steadier, be better satisfied with your own work, and improve as you keep up with your studies. Wake up and boss yourself strong enough to make yourself like to learn. Forget all about hard luck and get down to brass tacks."

"Aw, I guess not," finally answered Jones. "Too much confinement, too much study and too much night work."

"Forget it Jones," came from Bill Cooper. "Cut out all those waste hours and apply them to good use and study. Learn more and earn more. I will say right here, that if you promise to take up this study course, and be in earnest, Jim will keep you at work because you will be a better tinner inside of thirty days. Are you on?"

Jones still hesitated. He could not make up his mind.

"You need not promise at this moment," Jim spoke up. "Just drop the St. Louis Technical Institute a line and they will send you a booklet telling you all about the cost and terms and everything. While I was sitting and listening to you fellows, I was thinking of the nights I put in with the correspondence school in Cleveland."

"This school is still running, and I owe all I know about furnaces and heating to them. This school is The Cleveland Engineering Institute. It is some school, and most of my friends who are the real furnace men have taken this course."

"Jones, I'll tell you what I'll do," he added. "If you want to take up any of these courses, I will advance you a week's pay to do it. Hang your coat up on the same nail as before, and I will keep you on the job. The St. Louis Technical Institute or the Cleveland Engineering Institute are both recognized schools, and are recommended highly. Write to both of them, ask them for booklets and take your choice. I will help you all I can."

"So will I," Jim volunteered earnestly, "what do you say Jonsey?"

"You are all good sports," admitted Jones. "I'd be a fool to turn down such a chance. I'll write those letters and get the information. What are their addresses?"

"Now you're talking Jonsey," said Bill. "The St. Louis Technical Institute is located at 4543 Clayton Avenue, St. Louis, and Jim will tell you the Cleveland address."

"The Cleveland Engineering Institute is located at



8118 Euclid Avenue, Cleveland," answered Jim.

It is needless to say that Jones did promise, and did do the thing he saw was good for him.

All it takes is a little will power, and a little money every month.

You the reader, may know of hundreds of Joneses. They simply believe in hard luck, and that "no chance" stuff.

I will insist that anybody can improve his value as a producer of good service if he wants to do so.

There is no room for the lazy-minded person. No one wants to have a counterfeit workman.

Any man, in any walk of life can make good if he wants to do so. A correspondence course in sheet metal is better than a school because you can take more time to study. You are not crowded.

You can ask the same question a thousand times, because it is there in print. No teacher could serve you as well.

You pay as you learn, and as you learn more, you earn more, and as you earn more, the "more" pays for your course, and it stands you free besides getting better pay lasts forever.

There used to be a time when a correspondence course was looked upon as a joke, but now it is different.

I am sure that if you will ask any live business man, you will find that he has, or is now taking some kind of a correspondence course to help him in his business.

It is a pretty sweet thing to have some good, nationally known school sending to you its brains for a little money each month.

Do you know that with the little you pay monthly to a correspondence school you are getting the services of the very best brains in the United States?

Do you know that the very best teachers examine your work personally, and tell you how to do it right? Do you know that a good correspondence course will save you years of experience?

Do you know that a correspondence course will enable you to be rated high? Do you know that any correspondence school is your Dun and Bradstreet?

The lazy-minded hound who dares tell the world that he is in hard luck and had no chance is a simp. The chance is here all the time, but most low brows want to get money on a bluff instead of earning it in a legitimate and serviceable manner.

The Jones class has about ten million members.

Are you in on it? If you are, get out at once and get on the right side of knowledge and service.

You do not get paid for what you do, you get paid for what you know how to do.

Be educated and happy, or be ignorant and discontented.

It is up to you, but some day when you get old and your back gets weak, you will still believe that you did not have a chance. Just think over this and place yourself.

Be a success or a dub—no one will worry about it but you.

There is one system that no man can beat, and it is—that a boss can always fire a poor workman, but a poor workman can not always land a good job.

### **Fort Wayne Sheet Metal Contractors Will Organize on January 14th.**

The Jobbers' and Salesmen's Auxiliary to The Indiana Sheet Metal Contractors' Association gave a smoker and fellowship meeting to the Fort Wayne Sheet Metal Contractors at the Fort Wayne Builders' Exchange, Fort Wayne, Indiana, Thursday evening, December 30th. E. W. Norman, President of the Auxiliary, presided.

The hosts for the occasion were: E. W. Norman, of the Merchant & Evans Company; H. A. Beaman, of the Haynes-Langenberg Manufacturing Company; F. C. Wilkening, of the Standard Metal Company; J. C. Henley, of Tanner & Company; J. R. Strahlendorf, of the Peerless Foundry Company; Paul R. Jordan, of the Paul R. Jordan Company, and J. C. Weirman, of the Schaab Roofing & Supply Company, all of the Auxiliary; Joseph Gardner, President, and R. R. Reeder, Secretary, of the Indiana Sheet Metal Contractors' Association.

The meeting was opened at 8:00 p. m. and from the beginning a dominant note of enthusiastic co-operation was evident both from the full-sized attendance of the Fort Wayne sheet metal contractors and an apparent whole-hearted willingness on the part of all in attendance to enlist their services in the work.

Mr. Norman emphasized the aim of the Auxiliary by stating that it was its purpose to assist in promoting business and solving individual problems of the sheet metal contractors.

Several spirited talks were made by Fort Wayne sheet metal contractors on the subject of promotion of the sheet metal work. It was suggested that the sheet metal contractors of Fort Wayne organize a local association and affiliate with the state and national organizations. A general spirit of approval of this proposal was manifested by those present, and it was decided to hold a meeting for this purpose on January 14th.

In the course of the meeting, an urgent invitation was extended those present to attend the Indiana Sheet Metal Contractors' Convention which is to be held in Indianapolis, February 2nd, 3rd and 4th. A discussion of this Convention occupied a prominent place in the meeting.

### **Flint Sheet Metal Contractors Plan Fine Entertainment for State Convention.**

At a special meeting of the Flint, Michigan, Sheet Metal Contractors Association Thursday, December 30th, many plans for the entertainment of delegates to the state convention which is to be held in that city February 22nd, 23rd and 24th, were discussed.

One of the feature events will be a buffet luncheon Tuesday night at the Elks' Club. This affair will follow a vaudeville show at the Palace theatre. An athletic program is being arranged in addition to several clever stunts which are being kept secret.

Nothing is being left undone to make this evening one long to be remembered. Several speakers for the regular sessions of the Convention have been secured through the help of the Chamber of Commerce, all of which are men of high caliber.

### ***Dreis & Krump Manufacturing Company Purchase Smith Stack Seaming Mandrel.***

The patent rights, pattern, stock and goodwill of the Smith Stack Seaming Mandrel, formerly owned by the A. W. Smith Manufacturing Company, Ithaca, New York, have been purchased by the Dreis & Krump Manufacturing Company, 2915 South Halsted street, Chicago, Illinois, who are now in position to manufacture and make deliveries on this machine which is designed for doubling seaming ducts.

One of the principal features of this machine is that the metal is held firmly in place by adjustable arms, thus making it possible for one man to make even the larger size of ducts without having several men hold the sheets in place while being seamed.

### ***Condemns Unfair Competition in Sheet Metal Trade.***

TO AMERICAN ARTISAN AND HARDWARE RECORD:

In sending renewal to your valued publication, I feel I must give vent to a problem I have never seen discussed in your columns.

Perhaps it is one not confronted by many of your readers.

Having been in business for the past seven years in this country town of 800 population, doing metal roofing, furnace and sheet metal work, I have had much competition, and some of a very disagreeable nature, namely, the price cutting, the kind who don't know how to figure profit, and those who think competitors must be enemies.

I have been quite successful in meeting these, however, the most of them quitting the business.

Having had competition all my life, practically, I do not fear real competition, but the most aggravating of all is the one who has worked at the sheet metal business, but has settled on a farm or partially retired.

He does not have enough to occupy all his time, and decides to work at the old trade on the side.

He figures what he can make he is that much ahead.

He does not figure any expense as he does not depend on the side line for his living.

Consequently he sells his material and labor at a price he could not possibly exist on if he were depending on it for his living.

This is, in my mind, a very unfair competition for the business man.

The solution, I believe, lies in the hands of the manufacturer and wholesaler.

They depend on the bona fide dealers for their business, yet they sell goods to farmers and others who are not bona fide dealers, thereby injuring the ones they depend on for their main support.

These farmers cut the price where the consuming public look with disfavor upon the price which must be charged by the dealer.

In this day of peculiar business conditions it is a trying problem for the small dealer in the country towns.

In remonstrating to the wholesalers, I find they come back with a petty excuse, which they would think justifies them in doing this.

I fail to see where they are justified and I would

say, let them confine their business to the bona fide dealers.

If I were in a position to do so, it would be my ambition to force them to do so through a strong organization of sheet metal men.

Protect the dealer from this unscrupulous competition. I would appreciate seeing this problem discussed through your columns. Thanking you, I am,

Yours very truly,

M. R. EHLE.

Wayland, Michigan, January 1, 1921.

### ***Detroit Sheet Metal Contractors Are to Dine and Entertain on February Tenth.***

The Sheet Metal Contractors' Association of Detroit, Michigan, will give a dinner and entertainment on February tenth, at which Frank T. Daly and Frank E. Ederle, President and Secretary respectively of the State Association, will be special guests.

### ***Government Reports Increased Output of Lead and Zinc.***

The mine output of lead and zinc and the refinery output of lead in the United States increased greatly in 1920, after declines in 1919, and the smelter output of zinc was but a little under that of 1919, according to a statement by C. E. Siebenthal, of the U. S. Geological Survey, Department of the Interior, compiled from reports and estimates by producers and others.

Data for the Western States are taken from the advance statements issued by the Geological Survey's western offices. Statistics of imports and exports are taken from the records of the Bureau of Foreign and Domestic Commerce for 11 months, with an estimate for December.

The output of soft lead by mines of the Mississippi Valley and Eastern States was about 275,000 short tons, and that of argentiferous lead by mines of the Western States was about 236,000 tons, a total of 511,000 tons.

The corresponding figures for 1919 are 237,000, 206,000, and 443,000 tons, and for 1918 267,184, 314,470, and 581,654 tons.

The total increase in 1920 was 68,000 tons, as compared with a decrease of 138,500 tons in 1919. The southeastern Missouri district made the largest production, 183,000 tons, as compared with 157,158 tons in 1919, and the Coeur d'Alene district of Idaho came next, with about 121,000 tons, as against 83,833 tons in 1919. Utah had an output of 67,000 tons, an increase from 61,915 tons in 1919.

The imports of lead in ore were about 15,000 tons and in bullion about 49,000 tons, a total of 64,000 tons, as compared with 65,799 tons in 1919. Of the imports in 1920 Mexico furnished about 54,000 tons and Canada 4,000 tons.

The lead content of lead ore in bonded warehouses on November 30 was 16,187 tons and of base bullion 32,671 tons.

Part of this may have been smelted or refined, but not shipped, and thus may be included in smelter stocks.

The recoverable zinc content of ore mined in 1920



was about 597,000 tons, compared with 557,000 tons in 1919 and 632,243 tons in 1918.

The output of the Eastern States was about 102,000 tons, that of the Central States about 343,000 tons, and that of the Western States about 152,000 tons, compared with 122,000, 305,000, and 130,000 tons respectively in 1919.

The gain in the output of the Central States was made possible by an increase of nearly 50,000 tons in the Joplin district, and the gain in this district was chiefly the result of an increase in the output of Oklahoma, which reached a total of about 209,000 tons, the largest zinc output ever made by a single state, but Kansas also made a good gain, producing over 68,000 tons.

In 1919 Oklahoma produced 178,410 tons and Kansas 47,626 tons.

In 1920 Montana (Butte district almost wholly) apparently produced about 102,000 tons, as compared with 84,382 tons in 1919, and the New Jersey output declined to about 78,000 tons from 92,912 tons in 1919.

The output of the upper Mississippi Valley was about 37,000 tons, as compared with 47,553 tons in 1919.

The imports of zinc in ore increased from 17,009 tons in 1919 to about 23,000 tons in 1920.

The zinc content of ore imported from Mexico increased from 11,225 tons in 1919 to about 16,000 tons in 1920.

Australia furnished ore containing 3,852 tons of zinc and Canada and other countries sent smaller quantities.

The zinc content of zinc ore in bonded warehouses on November 30 was 25,642 tons. Some of this ore may have been smelted but not shipped and thus may be included in smelter stocks.

In January concentrates containing 60 per cent zinc brought in the Joplin district \$60 a ton.

The price soon dropped to \$50, remained practically stationary for two months, then dropped to \$45 or below for two months.

Through the second half of July and August the price was \$48, after which it fell to \$40, remained at that figure through October, dropped to \$30, and was still less at the end of the year.

The low price of lead and zinc toward the end of the year caused a sharp curtailment in these industries throughout the country.

The Franklin Furnace mines of New Jersey were operating at 50 per cent of normal capacity, and the zinc mines of east Tennessee and the mines of the upper Mississippi Valley, where only 12 or 14 mines were in operation, at about 60 per cent.

The disseminated-lead district of southeastern Missouri was mining at 70 to 75 per cent of its usual rate and the Joplin district at 60 to 70 per cent.

In the Joplin district not over 60 mines were in operation, the larger part of them in Oklahoma, and at the end of the year about 50,000 tons of 60 per cent zinc concentrates remained unsold at the mines.

In Colorado about 10 per cent of the usual output of lead and zinc is reported as being made, and in Utah about 30 per cent of the normal output of zinc.

The Utah Apex, a large lead producer, is closed. In the Coeur d'Alene region, Idaho, about 75 per cent of the usual output of lead was being made, but after the

closing of the Interstate-Callahan mine at the end of October not more than 10 per cent of the normal output of zinc.

In the Butte district, Montana, many mines were closed, the output was about 28 per cent of normal and one-fifth of it was being stored.

### ***Copper Surplus Is Still About the Same.***

Notwithstanding the fact that the rest of the world has reduced its surplus copper by some 200,000,000 pounds during the past year the stocks in the United States remain approximately the same.

It is true that the stocks of refined copper were reduced by some 150,000,000 pounds here, but the amount of blister has been increased by about that much and the stocks of both refined and unrefined now stand at about 900,000,000 pounds.

In England and Australia the stocks have been almost exhausted as against an accumulation at the beginning of the year of 10,000 tons in the former country and 25,000 tons in the latter.

French stocks were reduced 35,000 tons to 5,000 tons and Italian stocks 20,000 to 10,000 tons.

Daniel Guggenheim, of Guggenheim Brothers, says that 90 per cent of the copper today is selling below the cost of production and that the surplus stock will not be sold until the price is much higher, as the producers can finance the carrying of same for from three-quarters to a cent a pound a year.

He also stated that he could not recall a time when the production of copper in proportion to the capacity of producers and in proportion to consumption was so low.

### ***Thrift Week Is Good for Business.***

A concerted effort to teach the American people the importance of putting every dollar in the nation at work in 1921 is to be made during the week beginning January 17th. This will be nationally observed as Thrift Week.

Under the general direction of the Y. M. C. A., organizations interested in bank savings, insurance, home building and sound securities will carry to every part of the nation the gospel of work and save.

The Savings Division of the Treasury Department as its share in the success of the week is issuing a pamphlet entitled "Bossing Your Dollars" for the use of boys and young men in industry. The keynote of this pamphlet is found in the statement, The time to begin to save is the day you begin to work.

The need of America today is the working dollar. Countless millions are now sleeping between mattresses and in bureau drawers.

It is the purpose of Thrift Week to wake these up, to increase active capital for the benefit of every individual in the country and for the nation at large.

"When you attempt to throw dirt in the other fellow's eyes, be sure that the wind is in the right direction, lest it blow back and blind you instead."

# Instructive Notes and Queries

*The Service of This Information Bureau Is Free to Our Subscribers and They Are Urged to Use It Freely.*

## IMPORTS OF LEAD CAUSE LOWER DOMESTIC PRICES.

One of the chief causes for the recent decline in the price of lead is the surprisingly large amount of lead that has been lately imported into the United States.

In the first half of 1920, the largest quantities of imported lead came, as is ordinarily the case, from Mexico.

In August heavy imports of pig lead bars and old lead from Europe set in, and though an unusually large amount for that class of material, the quantity was more than doubled by similar imports in September.

At the same time, exports of lead have materially fallen off. Earlier in the year they averaged about 5,000,000 pounds monthly from foreign and domestic ores. In August and September they had dropped to about 700,000 and 2,260,000 pounds respectively.

These figures are all the more significant when comparison is made with the record of previous years.

Thus in 1919 a total of 141,813,127 pounds of lead was imported, of which pigs, bars, and old lead accounted for only 10,214,753 pounds. In 1920 in the months of August and September alone, more pig, bar, and old lead was imported than in 1918 and 1919 put together.

Pre-war importations of pigs, bars, and old lead averaged about 3,190,000 pounds annually.

That the heavy importations of lead have altered the complexion of the market there can be no doubt but their effect can also be overestimated, as the lead industry is singularly free of surplus stocks, and there is no overproduction in the trade.

In fact, it would appear that production this year will be smaller than that of last year.

## Issues Figures on Copper Production in 1920.

The smelter production of copper from domestic ores during the year 1920 is estimated by H. A. C. Jensen, of the United States Geological Survey, Department of the Interior, to be about 1,235,000,000 pounds, compared with 1,286,000,000 pounds for 1919.

The production of refined copper from foreign and domestic ores for the year was about 1,573,000,000 pounds, which is approximately 195,000,000 pounds less than for the year 1919.

The apparent domestic consumption was about 910,000,000 pounds; in 1919 it was 877,000,000 pounds.

The stocks of raw and refined copper at the end of 1920 were about 874,000,000 pounds, which represents a decrease of 30,000,000 pounds from those held at the end of 1919.

The total imports of raw and refined copper for the ten months ending October 30, 1920, according to the

Bureau of Foreign and Domestic Commerce, were 407,437,515 pounds.

Exports of copper for the same period were 543,695,851 pounds, compared with 516,627,775 pounds for the entire year 1919.

The continued decreased production, the large stocks, and the low domestic consumption were due entirely to the generally depressed conditions of industry throughout the world, which did not permit the absorption of as great quantities of copper as had been hoped for.

Low exchange and the great stocks of scrap and secondary copper available both in the United States and abroad also decreased the demand for new copper.

The salient features of the copper industry during 1920 were a small hesitating demand, decreased production, continued small exports, particularly during the last half of the year, and labor troubles.

\* \* \*

### "Blue Bird" Wicks.

From John F. Cartwright, 224 Main Street, Bowling Green, Kentucky.

Kindly advise who manufactures "Blue Bird" oil stove wicks.

Ans.—Dangler Stove Company, Division American Stove Company, Cleveland, Ohio.

### Aluminum Sheets.

From Neil Coffey, Grand Rapids, Wisconsin.

Kindly advise where I can purchase aluminum sheets suitable for table covers.

Ans.—S. Birkenstein and Sons, 377 West Ontario, Street; United Smelting and Aluminum Company, Incorporated, 53 West Jackson Boulevard, both of Chicago, Illinois; United States Reduction Company, East Chicago, Indiana.

### Solder For Aluminum.

From E. E. Bennett, Apalachicola, Florida.

Can you tell me how to make a good solder for aluminum ware.

Ans.—The large use which is now being made of aluminum kitchen utensils results in frequent calls upon the sheet metal worker for soldering work on such utensils. A good solder for this purpose which can be applied with an ordinary soldering iron can be made from ninety-five parts of tin, five parts of bismuth, or ninety-seven parts of tin and three parts of bismuth; vaseline, benzine, paraffin, or similar oil products being used as a flux. Before soldering, the article should be thoroughly cleansed and the parts to be united heated enough so as to make the solder cling to them.

### Correct Way of Cutting Curved Glass.

From George F. Curtis, Odebolt, Iowa.

Will you kindly inform me as to the correct way of placing curved glass upon board for cutting?

Ans.—The curved side of the glass should be down facing the board, so that the glass will spin while it is on the board.



# Illustrations of New Patents

*Watch This Page. Keep Yourself Informed Concerning Improved Devices Which May Save Labor in Your Shop or Add Another Source of Income to Your Retail Store.*

1,359,403. Wrench. Jesse H. Lynds, Muskogee, Okla. Filed Feb. 21, 1920.

1,359,415. Padlock. Gaetano Milone, Middletown, Conn. Filed April 19, 1920.

1,359,421. Pipe-Wrench. Albert Partin, Talkeetna, via Anchorage, Alaska. Filed April 2, 1920.

1,359,423. Wrench-Handle. John C. Pettibone, Ansonia, Conn. Filed Oct. 6, 1919.

1,359,436. Sled. Walter Schutte, Haddam, Conn. Filed May 21, 1920.

1,359,437. Spark-Plug. Edward H. Schwab, South Bethlehem, Pa. Filed March 3, 1919.

1,359,474. Level. Philip Wernick, Toronto, Ontario, Canada. Filed June 23, 1919.

1,359,486. Combined Ladder and Chair. Tony Buh, Reitz, Pa. Filed March 9, 1920.

1,359,524. Clamp. George W. Pelton, Muscatine, Iowa. Filed March 15, 1920.

1,359,527. Collapsible Supporting and Leveling Frame for Ironing-Boards. John A. Reed, Miles City, Mont. Filed March 25, 1920.

1,359,591. Spark-Plug. Harry M. Grimes, Kokomo, Ind. Filed April 29, 1918.

1,359,618. Fish-Lure. Alfred S. Oliver and James S. Gruber, Medical Lake, Wash. Filed May 16, 1918.

1,359,629. Fruit-Jar Opener. Charles F. Standish, Greene, N. Y. Filed April 12, 1920.

1,359,634. Churn. Peter R. Thibault, St. Ignace, Mich. Filed March 16, 1920.

1,359,657. Clothespin. Charles J. Bartell, Elmont, N. Y. Filed June 14, 1918.

1,359,690. Fountain-Brush. Christopher A. Garvey, Clayton, Mo. Filed March 7, 1919.

1,359,704. Fencepost. Harry H. Howell, Hope, Ark. Filed Oct. 25, 1919.

1,359,722. Kitchen-Knife. Robert L. Moffett, Chicago, Ill. Filed May 28, 1920.

1,359,723. Combination Chair and Ironing-Board. Gus Mohammed, Detroit, Mich. Filed June 28, 1920.

1,359,733. Fountain Shaving-Brush. Benjamin C. Palmer, Honolulu, Hawaii, assignor to Ernest Marshall, Honolulu, Hawaii. Filed Aug. 23, 1917.

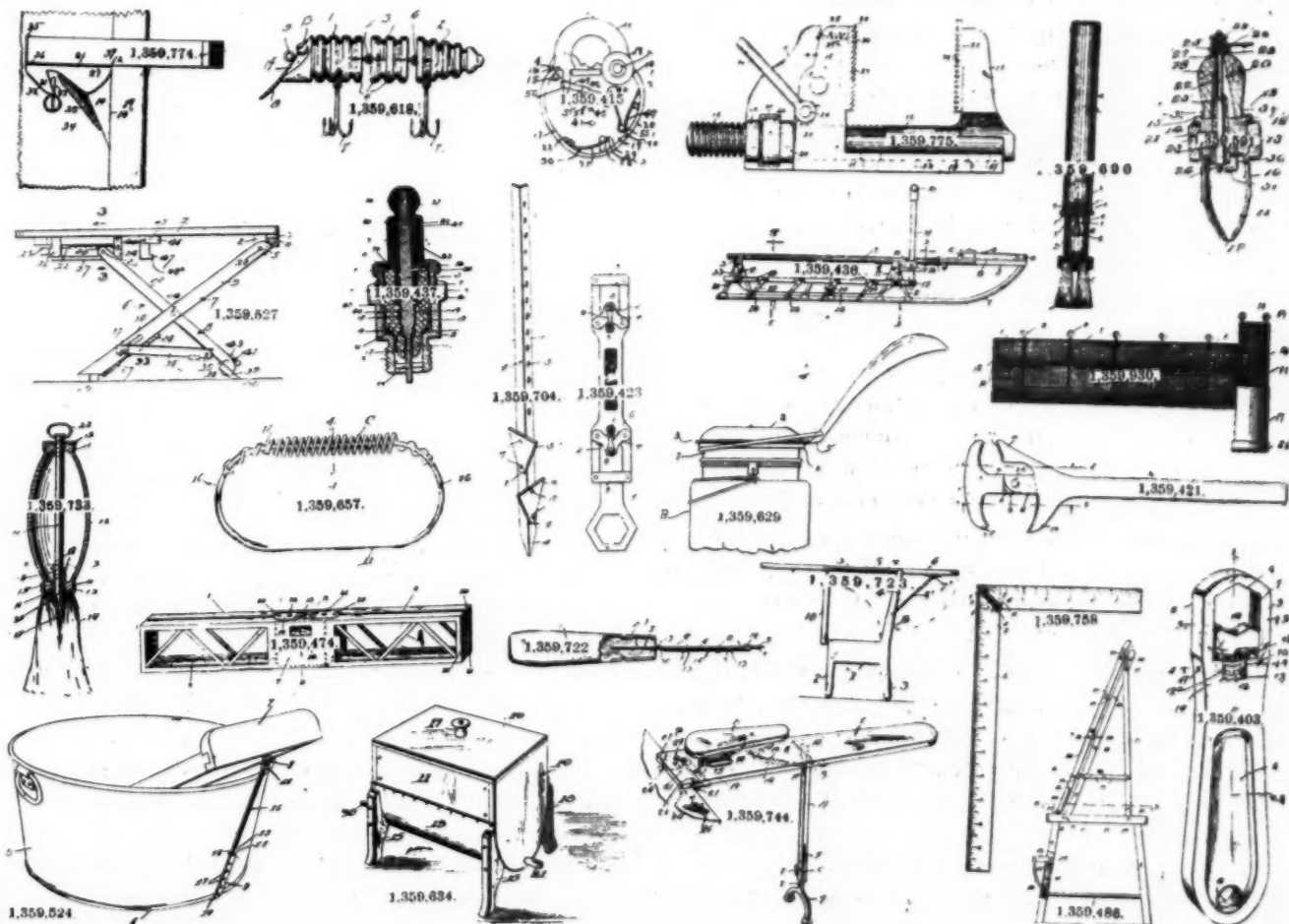
1,359,744. Ironing-Board. Richard Raby, Loudonville, Ohio, assignor of one-half to George F. Raby, Loudonville, Ohio. Filed Jan. 20, 1920.

1,359,758. Mechanic's Square. William M. Slavik, Oak Park, Ill. Filed March 10, 1919.

1,359,774. Latch. Christian F. Weil, Jefferson township, Warren county, Iowa. Filed Aug. 2, 1919.

1,359,775. Automatic Pipe-Vise. Gilbert E. White, Des Moines, Iowa. Filed Jan. 24, 1920.

1,359,930. Flytrap. Arthur H. Strampe and John H. Strahmann, Paullina, Iowa. Filed Feb. 9, 1917.



# Weekly Report of the Markets

*General Conditions in the Steel Industry. Review of Prices and Tendencies in Sheet Metals, Pig Iron, etc.*

## INCREASED TONNAGE FOLLOWS LOWERING OF PRICES.

The iron and steel industry of the country wound up the year in a state bordering closer to stagnation than at any time since 1914—that is, over one-half—56 per cent, to be exact—of the country's steel capacity was inactive, the other half, or 44 per cent, was doing very well.

The year 1920 witnessed the rise and fall of the independent steel interests.

Demand was abnormal, hectic, the leading interests booked orders to be filled months and months ahead at the price level adopted March, 1919.

The independents took advantage of the situation and raised prices to levels never before reached in the history of the industry, and when depression hit the country and consumers withheld their custom the independents were the first to be affected.

They have been gradually cutting prices for weeks to the level of the corporation, and late last week the Republic Iron & Steel Company announced a cut in standard pipe prices of about \$7 to the common level.

One or two other independents made this same announcement some days ago, and this leaves the entire list of finished steel products now at the level of the Steel Corporation.

Pipe and rails were the last to go. Railroads withheld their orders and forced a reduction about 10 days ago, and the letting up in the demand for pipe undermined that commodity.

However, it is estimated that the independents made between \$250,000,000 and \$300,000,000 more in 1920 by advancing their prices than if they had followed the schedule of the leading interest.

The close of the year finds the independent steel mills operating anywhere between 20 and 40 per cent of capacity as a whole, while the leading interest has forced a rate of operating as high as 90 per cent, as against 80 per cent Christmas week, but this rate is not expected to hold long.

Current bookings among the independents are at the lowest ebb in years, nor must it be inferred that the leading interest has not felt the depression.

Last week Judge E. H. Gary, chairman of the United States Steel Corporation, stated that daily bookings of that interest were in excess of the capacity of its mills at the time of organization.

This would indicate bookings of less than 25,000 tons a day against a current daily steel ingot capacity of 52,000 tons. This shows the booking of new business to be less than half the present capacity.

A new development became noticeable last week namely a growing tendency on the part of the independents to shade the common schedule of prices so recently attained.

This move has not yet brought out any business and

in fact is operating to make the consumer more wary than ever.

How far this move will be carried is the speculation of the trade in general especially as the resale tonnages which have been hanging over the market are being gradually absorbed and becoming less of a factor.

The largest factor against the move is the still too high cost of production which, with many mills, leaves them with a loss even at the corporation schedule of prices.

Some of the independents met this difficulty with the announcement of a wage reduction effective January 1 and the trade in general looked for the others to reduce costs in any way than cutting wages.

However, it is anticipated that wage cuts will be announced in the not distant future. Thousands of steel workers are idle and the army of unemployed throughout the country is growing rapidly.

## Steel.

The first break in the upward movement of wages paid to puddlers and finishing hands since early in 1919 occurred late last week.

Wages of the Amalgamated Association of Iron, Steel & Tin Workers were reduced through the operation of the sliding scale arrangement which it has with the Western iron manufacturers.

The bi-monthly examination of the sales sheets of representative bar iron mills of the Middle West late last week disclosed that the sales price on shipments during the past two months was 3.50 cents as against 3.55 for the preceding period.

This cuts puddlers' rates from \$18.76 to \$18.52 for the January-February period and causes a corresponding reduction in finishers' wages.

It is reasonable to infer that such wage reductions will be reflected in more favorable prices to the trade.

## Copper.

Consumers have again made their appearance in the market and are buying in larger quantity than for some time past.

The interest that has been selling at 12.50 cents a pound for spot and 12.75 for later deliveries has advanced its price half a cent.

Some of the smaller producers were willing to meet this later price, but no intimation as to the position of the larger producers, who have been holding out for a much higher price, was forthcoming.

At 12½ cents copper was selling 6 cents below the average selling price for the ten-year period between 1909 and 1919, which was 18.53 cents a pound.

Before the general wage reduction took place copper was selling at below the cost of production of more than 90 per cent of the country's output.

Copper sheet, mill base has declined in Chicago from 22½ to 21½ cents per pound.



**Tin.**

Imports of tin for December totaled 2,470 tons and stocks on hand and landing as of December 31 amounted to 2,856 tons, while deliveries were 2,580 tons.

The domestic market continues to follow London fluctuations. Buyers are hard to find and any lots on the market which have to be liquidated are sold at sharp concessions.

An increase of tin prices has occurred in the Chicago market. Pig tin has advanced from 37 cents per pound to 42½ cents and bar tin from 39 cents to 44½ cents per pound.

**Lead.**

There were 500 tons of lead exported to England Tuesday of this week and 475 tons of base bullion received from Mexico.

Sellers again advanced their holding prices yesterday in the outside market from 4.70 to 4.80 for New York and from 4.60 to 4.75 cents a pound for St. Louis deliveries.

The leading interest continues to quote 4.75 cents for both New York and St. Louis.

Joplin reports that shipments of lead ore from that district for 1920 were in excess of the 1919 shipments by 16,595 tons, and that until the last two months prices were high and then dropped to comparatively low levels. Joplin shipments last week amounted to 655 tons, as against 1,334 tons during the preceding week, while shipments for the year totaled 88,954 tons, as compared with 72,359 tons for 1919.

High grade sulphide ore is now quoted at \$58.05, as against \$91.20 a ton in December, 1919, and the 80 per cent grades \$47.50 to \$55, as against \$90 the year before.

Chicago lead prices have gone up ten points. American pig lead advanced from \$5.15 to \$5.25 per hundred pounds and bar lead from \$5.90 to \$6.00 per hundred pounds.

**Solder.**

Another price decline has occurred, amounting to \$1.50 per hundred pounds in the Chicago solder market. Prices now in effect are as follows: Warranted 50-50, per hundred pounds, \$23.50; Commercial 45-55, per hundred pounds, \$21.50; and Plumbers', per hundred pounds, \$19.50.

**Zinc.**

The asking price of zinc in the domestic market are unchanged at 6 cents a pound for New York and 5.65 for St. Louis. The market continues dull and quiet.

The Geological Survey estimate that the production of zinc from domestic ores during 1920 amounted to 449,000 tons, as against 452,000 tons during 1919, while that smelted from foreign ores totaled 14,000 tons in 1920, as compared with 18,000 tons in 1919.

Zinc in slabs has declined in the Chicago market from \$6.35 per hundred pounds to \$6.05.

**Sheets.**

The leading interest is carrying over about three months of business from this year and thus its closing of contracts is proceeding leisurely.

Among the independents there is more interest in the reinstatement of business than in new business, as some contracts have not been fully specified while in other cases shipments have been held up when specifications had been filed long ago.

There is very little new inquiry in the market. As noted in the report of a week ago, there is an inquiry in the market for a variety of blue annealed, black and galvanized, aggregating 20,000 tons, for equal deliveries over the first half of the new year.

But the inquiry went out for prices to be in hand by January 1st, so that there are no developments reported with respect to this inquiry.

**Tin Plate.**

Among the independents there have been many cases of consumers holding up shipments, frequently with notice that it is the intention to revise specifications already furnished.

In these instances the mills are more interested in getting releases so that contracts for the half year now expiring may be completed, than in securing contracts for the next half year.

However, a moderate volume of contract business for the half year has been done.

In the case of the leading interest there is such a large carryover, amounting to about three months of business with most customers, that the closing of contracts can proceed leisurely.

**Old Metals.**

Wholesale quotations in the Chicago district which should be considered as nominal are as follows: Old steel axles, \$17.00 to \$18.00; old iron axles, \$30.00 to \$32.00; steel springs, \$18.00 to \$19.00; No. 1 wrought iron, \$13.50 to \$14.00; No. 1 cast, \$17.00 to \$17.50; all per net tons. Prices for non-ferrous metals are quoted as follows, per pound: Light copper, 8 cents; light brass, 5 cents; lead, 3½ cents; zinc, 3½ cents; cast aluminum, 10 cents.

**Pig Iron.**

It has been a fifty-fifty year in the iron trade, according to the report of the Matthey-Addy Company, Cincinnati, Ohio.

The first six months were all that anyone could desire—a demand for all the iron that could be made, steadily advancing prices and general confidence.

Exactly the opposite is true of the last six months—production has steadily declined, prices have fallen and there has been an entire lack of hopefulness.

In other words, the bottom fell out. Yet on the average it has been a fairly profitable year, for the first half more than made up for the last half.

We all knew it had to come. Everyone realized that it was quite unthinkable that the iron business could continue to be conducted with prices from three to four times what they were before the war.

Yet when the collapse came it surprised the trade for there had been a widespread idea that the decline to a normal level would be a long easy and gradual affair.

It has not proved to be that way. Perhaps it is just as well. If the dog's tail had to be cut off, why cut it off by inches. Better do it with one stroke.

# Current Hardware and Metal Prices.

AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing Western Hardware and Metal prices corrected weekly.

The prices and discounts quoted on this and the following pages, are, for the most part, subject to change without notice. Owing to the unsettled conditions of the markets and the shortage of materials it is practically impossible for any manufacturer to guarantee his prices for any given length of time.

METALS		HARDWARE		Scratch.		BEVELS, TEE.	
<b>PIG IRON.</b>		<b>ADZES.</b>		No. 18, socket Handled .....per doz. 2 50		Stanley's Rosewood handle, new list .....Nets	
Northern Fdy. No. 2.....\$33.70		Carpenters' Plumbs .....Per doz. \$29.00		No. 344 Goodell- Pratt, list less.....35-40%		Stanley iron handle.....Nets	
Southern Fdy. No. 2.....40.67		<b>COOPERS'.</b>		No. 7 Stanley....." 2 25		<b>BINDING CLOTH.</b>	
Lake Sup. Charcoal.....33.70		Barton's .....Net		<b>AXES.</b>		Zincd .....55%	
Malleable .....48.50		White's .....Net		First Quality, Single Bitted, 3 to 4 lb., per doz. 16 50		Brass .....40%	
<b>FIRST QUALITY BRIGHT TIN PLATES</b>		Railroad. Plumbs .....Per doz. 30.00		First Quality, Double Bitted .....per doz. 22 50		Brass, plated .....60%	
Per Box		<b>AMMUNITION.</b>		<b>Broad.</b>		<b>BITS.</b>	
IC 14x20..112 sheets \$13 10		Shells, Loaded, Peters.		Plumbs. Can. Pat., 6-lb. 65 00		Auger.	
IX 14x20.....15 15		Loaded with Black Powder, 18%		Single Bitted (without handles).		Jennings Pattern .....Net	
IXX 14x20.....16 40		Loaded with Smokeless Powder .....18%		Plumbs, 4 1/4-lb. ....19 50		Ford Car.....List plus 5%	
IXXX 14x20.....17 70		Winchester.		Double Bitted (without handles).		Ford's Ship....." " 5%	
IC 20x28.....26 20		Smokeless Repeater Grade, 15%		Plumbs, 4 1/4-lb. ....23 50		Irwin .....35%	
IX 20x28.....30 30		Smokeless Leader Grade...15%		<b>BAGS, PAPER, NAIL.</b>		Russell Jennings.....plus 20%	
IXX 20x28.....32 80		Black Powder .....15%		Pounds ... 10 16 20 25		Clark's Expansive .....33 1/4%	
IXXX 20x28.....35 40		U. M. C.		Per 1,000..\$5 00 6 50 7 50 9 00		Steer's " Small list, \$22 00..5%	
IXXXX 20x28.....38 00		Nitro Club.....18%		<b>BALANCES, SPRING.</b>		" " Large " \$26 00..5%	
<b>COKE PLATES</b>		Arrow .....18%		Sight Spring.....Net		Irwin Car.....35%	
Cokes, 180 lbs.... 20x28 \$17 80		New Club.....18%		Straight .....Net		Ford's Ship Auger pattern Car .....List plus 5%	
Cokes, 200 lbs.... 20x28 18 00		Gun Wads—per 1000.		<b>BARS, WRECKING</b>		Center .....10%	
Cokes, 214 lbs....IC 20x28 18 30		Winchester 7-8 gauge 10&7 1/4%		V. & B. No. 12.....\$0.45		Countersink.	
Cokes, 270 lbs....IX 20x28 20 30		" 9-10 gauge 10&7 1/4%		V. & B. No. 24.....0.75		No. 13 Wheeler's..per doz. \$2 25	
<b>BLUE ANNEALED SHEETS.</b>		" 11-28 gauge 10&7 1/4%		V. & B. No. 324.....0.80		No. 20 " " 2 00	
Base .....per 100 lbs \$4 68		Powder, Each		V. & B. No. 30.....0.85		American Snailhead " 1 75	
<b>ONE PASS COLD ROLLED BLACK.</b>		DuPont's Sporting, kegs..\$11 25		V. & B. No. 330.....0.90		" Rose...." 2 00	
No. 18-20.....per 100 lbs \$5 80		" 1/4 kegs 3 10		<b>BASKETS.</b>		" Flat...." 1 40	
No. 22-24.....per 100 lbs. 5 85		DuPont's Canisters, 1-lb.. 56		Clothes.		Mahew's Flat...." 1 60	
No. 26.....per 100 lbs. 5 90		" kegs.. 22 00		Small Willow...per doz. 15 00		" Snail...." 1 90	
No. 27.....per 100 lbs. 5 95		" 1/4 kegs... 5 75		Medium Willow.. " 17 00		Dowel.	
No. 28.....per 100 lbs. 6 00		" canisters 1 00		Large Willow.... " 20 00		Russel Jennings.....plus 20%	
No. 29.....per 100 lbs. 6 10		Hercules "E.C.", kegs..... 22 50		Galvanized. 1 bu. 1 1/2 bu.		Gimlet.	
<b>GALVANIZED.</b>		Hercules "Infallible", 25-can drums ..... 22 00		Per doz.....\$16 08 \$18 72		Standard Double Cut Gross \$8 40	
No. 16.....per 100 lbs. \$6 60		Hercules "Infallible", 10 can drums ..... 9 00		<b>BEATERS.</b>		Nail Metal Single Cut .....Gross \$4 00—\$5 00	
No. 18-20.....per 100 lbs. 6 75		Hercules "E.C." and "Infal- lible", canisters ..... 1 00		Carpet. Per doz.		Reamer.	
No. 22-24.....per 100 lbs. 6 90		Hercules W. A. 30 Cal. Rifle, canisters ..... 1 25		No. 7 Tinned Spring Wire..\$1 10		Standard Square.....Dox. 2 50	
No. 26.....per 100 lbs. 7 05		Hercules Sharpshooter Rifle, canisters ..... 1 25		No. 8 Spring Wire Cop- pered ..... 1 50		American Octagon... " 2 50	
No. 27.....per 100 lbs. 7 20		Hercules Bullseye Revolver, canisters ..... 1 00		No. 9 Preston.....1 75		Screw Driver.	
No. 28.....per 100 lbs. 7 35		<b>ANVILS</b>		<b>Egg.</b>		No. 1 Common..... 40	
No. 30.....per 100 lbs. 7 85		Solid Wrought...23 & 23 1/2 per lb.		No. 50 Imp. Dover.....\$1 10		No. 26 Stanley..... 75	
<b>BAR SOLDER</b>		<b>ASBESTOS.</b>		No. 102 " " Tinned 1 35		<b>BLADES, SAW.</b>	
Warranted, 50-50 .....per 100 lbs. \$23.50		Paper up to 1/16.....10c per lb.		No. 150 " " hotel 2 10		Wood.	
Commercial, 45-55 .....per 100 lbs. 21.50		Millboard 3/32 to 1/4...10 1/2c per lb.		No. 10 Heavy hotel tinned 2 10		Diaston 30-in.	
Plumbers' .....per 100 lbs. 19.50		Corrugated Paper, (250 sq. ft.).....\$6.50 per 100 lbs.		No. 13 " " " 3 30		Nos. ....6 66 26	
<b>ZINC.</b>		Rollboard .....11c per lb.		No. 15 " " " 3 60		\$9 45 \$10 05 \$9 45	
In slabs .....\$6.05		<b>AUGERS.</b>		No. 18 " " " 4 50		<b>BLOCKS.</b>	
<b>SHEET ZINC.</b>		Boring Machine .....40 @ 40&10%		Hand.		Wooden .....20%	
Cask lots .....13c		Carpenter's Nut.....50%		Per doz.\$11 50 13 00 14 75 18 00		Patent .....20%	
Less than cask lots.....13 1/4-13 1/2c		Hollow.		<b>Moulders'.</b>		<b>BOARDS.</b>	
<b>COPPER.</b>		Bonney's .....per doz. 30 00		12-inch .....Per doz. 20 00		Stove.	
Copper Sheet, mill base.....21 1/2c		Post Hole.		<b>BELLS.</b>		24x24 .....13 65	
<b>LEAD.</b>		Iwan's Post Hole and Well...30%		Call.		26x26 .....16 05	
American Pig .....\$5.25		Vaughan's, 4 to 9 in. .....per doz. \$14.00		3-inch Nickered Rotary Bell, Bronzed base....per doz. \$5 50		28x28 .....18 35	
Bar .....6.00		<b>Ship.</b>		Cov.		30x30 .....21 30	
Sheet		Ford's .....Net		Kentucky .....30%		33x33 .....25 50	
Full coils .....per 100 lbs. \$8 50		<b>AWLS.</b>		Door. Per doz.		36x36 .....30 50	
Cut coils .....per 100 lbs. 8 75		No. 3 Handled.....per doz. \$0.65		New Departure Automatic \$7 50		Wash.	
<b>TIN.</b>		No. 1050 Handled " 1 40		Rotary.		No. 760, Banner Globe, (single) .....per doz. \$5 25	
Pig tin .....42 1/2c		Patent asst'd, 1 to 4 " 85		3 -in. Old Copper Bell... 6 00		No. 652, Banner Globe, (single) .....per doz. 6 75	
Bar tin .....44 1/2c		Harness.		2 -in. Old Copper Bell, fancy ..... 8 00		No. 801, Brass King per doz. 8 25	
		Common ..... 1 05		3 -in. Nickered Steel Bell 6 00		No. 860, Single—Plain Pump ..... 6 25	
		Patent ..... 1 00		3 1/2-in. Nickered Steel Bell 6 50		<b>BOLTS.</b>	
		<b>Peg.</b>		<b>Hand.</b>		Carriage, Machine, etc.	
		Shouldered ..... 1 60		Hand Bell polished List plus 15%		Carriage, cut thread, 3/4x6 and sizes smaller and shorter .....30-10%	
		Patented ..... 75		White Metal..... " 15%		Carriage, sizes larger and longer than 3/4x6...20-10-5%	
				Nickel Plated..... " 5%		Machine, 3/4x4 and sizes smaller and shorter...40-5%	
				Swiss ..... " 10%		Machine, sizes larger and longer than 3/4x4...30-5%	
				<b>Miscellaneous.</b>		Stove .....60-10%	
				Church and School, steel alloys .....30%		Tire .....40-5%	
				Farm, lbs...40 50 75 100		Wortise, Door.	
				Each ...\$3 00 3 75 5 50 7 25		Gem, Iron.....5%	
						Gem, bronze plated.....5%	